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ABSTRACT

This report presents national statistics on federal aid to graduate students in the sciences and engineering for fall, 1973. Data were provided by every institution with a doctoral program in science or engineering. The characteristics of graduate enrollment examined in this report are: enrollment status (full and part time); distribution among fields of science; level of study (first-year or beyond); citizenship (U.S. and foreign); control of institution (public or private); and sex of graduate students. Data on types and sources of major support were provided for full-time students only. Postdoctoral utilization by field of science was examined in terms of type and source of support and year of the Ph.D. Appendices include notes on general methodology, classification of institutions in the survey, detailed statistical tables, and a reliability and validity assessment of the 1973 survey. (MLH)

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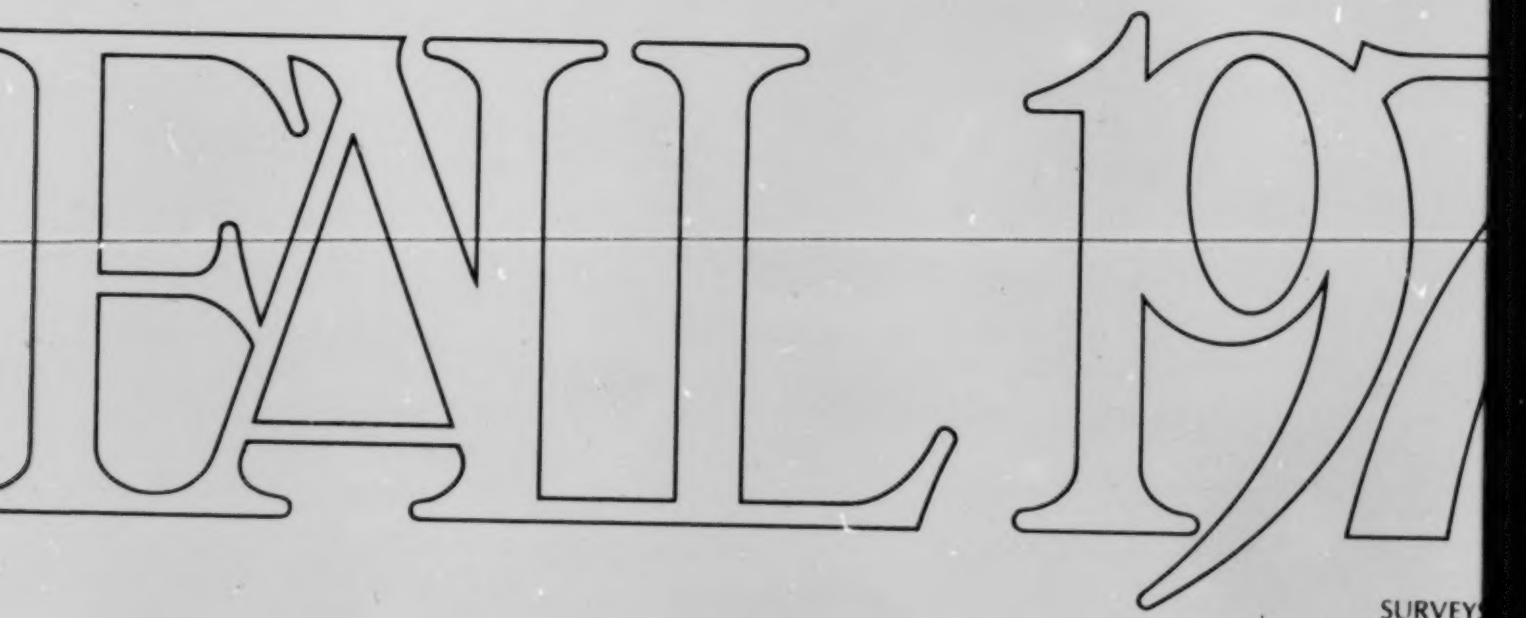
# GRADUATE SCIENCE EDUCATIO

## Student Support and Postdoctora

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# FOREWORD

The issues and problems surrounding graduate education in the United States have been the subject of much public attention in recent years. Today, discussion centers around such aspects as supply and demand, utilization of graduates in areas of social need, productivity, and barriers to the entry of women and minorities. Evaluation of these issues has taken place at the same time that a number of social and economic forces have emerged that significantly affect graduate education. Student attitudes and demands changed as the labor market for highly educated persons tightened in several scientific disciplines. Declining rates of enrollment confronted universities as they faced financial distress caused by inflation.

Federal policy concerning the support of graduate students also shifted. Federal aid to students and programs for the general support of institutions has been reduced in light of changing national priorities for resources. Among Federal agency programs affected by the shifts in funding were student aid under the Office of Education's National Defense Education Act, the National Science Foundation's and the National Aeronautics and Space Administration's traineeship program.

The Survey of Graduate Science Student Support and Postdoctorals, the subject of this report, is the single source of national statistics on financial aid to graduate students in the sciences and engineering. This survey was launched in 1972 to continue to provide a national data base formerly supplied on forms submitted by institutions applying for suppo program. Through analysis of the data, a pictur changes in Federal policy on graduate enrollm socioeconomic factors.

Every institution with a doctorate program surveyed in both 1972 and 1973, and every insti The National Science Foundation is grateful to department chairmen for the success of this data the 1973 survey have appeared in three prio technical notes in appendix I, and have been ma for use in the planning of future resource allocat education.

The report was prepared in the Division Charles E. Falk, Director.

May 1975

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submitted by institutions applying for support under the NSF traineeship program. Through analysis of the data, a picture is obtained of the impacts of changes in Federal policy on graduate enrollment as they interact with other socioeconomic factors.

Every institution with a doctorate program in science or engineering was surveyed in both 1972 and 1973, and every institution responded in both years. The National Science Foundation is grateful to the graduate deans and their department chairmen for the success of this data-collection effort. The results of the 1973 survey have appeared in three prior publications, as listed in the technical notes in appendix I, and have been made available to each respondent for use in the planning of future resource allocations within institutions of higher education.

The report was prepared in the Division of Science Resources Studies, Charles E. Falk, Director.

H. Guyford Stever, Director
National Science Foundation

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# general notes

The statistical coverage of graduate enrollment and postdoctorals in this report pertains to doctorate-granting institutions only, including their medical school components, and is limited to the sciences and engineering. The term "science" in this report is understood to include engineering. Where the term "graduate enrollment" is used, it is understood to refer to the total of all full- and part-time science students enrolled for advanced degrees; candidates for first-professional degrees, including the M.D. and D.D.S., were excluded.

Fall 1973 statistics were provided by 6,559 master's and doctorate-level departments within 339 institutions of higher education. Trend data for the period 1967-73 were derived by means of an indexing method which linked the 1972 and 1973 survey data to statistics provided for 1967-71 on NSF traineeship applications.

The term "matched" departments refers to the 4,112 departments that provided survey data in both 1972 and 1973.

Details shown in statistical tables may not add to totals because of rounding.

# acknowledgments

This report was prepared in the Univ
Studies Group by Penny D. Foster, Associate S
Phillip Neal. Richard M. Berry, Study Directo
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This report was prepared in the Universities and Nonprofit Institutions Studies Group by Penny D. Foster, Associate Study Director, with the assistance of Phillip Neal. Richard M. Berry, Study Director, supervised the preparation of the report, and William L. Stewart, Head of the R&D Economic Studies Section, provided guidance and review. The assistance of graduate deans who coordinated the institutional responses and science department chairmen who supplied the data at science Ph.D.-granting institutions is gratefully acknowledged.

# CONTENTS


Page

HIGHLIGHTS ..... vi

INTRODUCTION ..... vii

**Section 1.** Trends in Graduate Enrollment in Science and Engineering .... 1

General Characteristics, 1972 to 1973 ..... 1

Full-Time Graduate Students ..... 2

Source of Major Support ..... 4
Type of Major Support ..... 5
Level of Study ..... 7
Citizenship ..... 7
Sex of Graduate Students ..... 8
Type of Institution ..... 9
Level of Department ..... 10
Graduate Departments in Medical Schools ..... 10

**Section 2.** Fall 1973 Characteristics ..... 12

Graduate Enrollment ..... 12

Full-Time Graduate Students ..... 15

Source of Major Support ..... 15
Type of Major Support ..... 17
Citizenship ..... 17
Sex of Graduate Students ..... 18
Graduate Departments in Medical Schools ..... 21

**Section 3.** Postdoctorals ..... 22

Trends in Postdoctoral Utilization in Science and Engineering ..... 22

Comparison with Research Assistantship Utilization ..... 22

General Characteristics, Fall 1973 ..... 23

APPENDIXES

I. Technical Notes .....

General Methodology .....

Assessment of Coverage, Consistency
Methodology of 1973 Survey: the Reli
Validity Survey .....

II. Classification of Institutions in Survey

III. Detailed Statistical Tables[1] .....

IV. Instructions and Consolidated Departm


[1] See note on p. 24.

Page

... vi

... vii

ent in Science and Engineering .... 1

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... 15

... 15

... 17

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... 22

n Science and Engineering ... 22

istantship Utilization ... 22

... 23

APPENDIXES

I. Technical Notes ... 25

General Methodology ... 25

Assessment of Coverage, Consistency of Reporting, and Methodology of 1973 Survey: the Reliability and Validity Survey ... 25

II. Classification of Institutions in Survey ... 46

III. Detailed Statistical Tables[1] ... 51

IV. Instructions and Consolidated Departmental Data Sheets ... 54

[1] See note on p. 24.

# HIGHLIGHTS

## GRADUATE ENROLLMENT AND SOURCES OF SUPPORT

- In fall 1973 doctorate-granting institutions enrolled almost 218,000 full- and part-time graduate students in the sciences and engineering, representing a drop of 1 percent from the previous year and continuing the downward trend that began in 1970. Every area of science showed effects of this decrease except the life sciences and psychology, both of which went up 2 percent.

- Full-time enrollment which accounted for 164,300 students, went down almost 3 percent from 1972 to 1973, while part-time enrollment went up 4 percent. This shift to part-time graduate study indicates a growing dependence by students upon employment in order to complete their graduate education.

- Over a 7-year time span, full-time graduate enrollment showed an overall decline of 5 percent from its 1967 base, with the students dependent on Federal support declining by 40 percent during this period. While Federal assistance was on the decline, both institutional and self-support were on the increase.

- The number of students dependent
traineeships declined 22 percent betwee
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- The foreign graduate student population
students in 1973 continued the downw
Psychology was the only area of scien
students between 1972 and 1973.

## POSTDOCTORAL UTILIZATION AND SUPP

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- The number of students dependent upon Federal fellowships and traineeships declined 22 percent between 1972 and 1973, while institutionally supported fellows-trainees went up by 15 percent. Research assistants dependent on Federal support also declined, but by only 2 percent. This decline was offset by increases in institutional and other support of 8 percent and 10 percent, respectively.

- The foreign graduate student population which amounted to 30,800 full-time students in 1973 continued the downward trend noted in previous years. Psychology was the only area of science to show an increase in foreign students between 1972 and 1973.

POSTDOCTORAL UTILIZATION AND SUPPORT

- Science and engineering graduate departments utilized 16,400 postdoctoral appointees in 1973, 69 percent of whom received some form of Federal support. When examined in terms of change since 1967, the number of postdoctorals rose 31 percent by 1972, but a 6-percent drop was reported between 1972-73. This change in direction may be influenced by lower unemployment rates for doctoral scientists and engineers in 1973, since postdoctoral appointments are considered to be temporary, short-term employment for recent Ph.D. graduates.

# INTRODUCTION

Beginning in 1965 the Graduate Traineeship Program of the National Science Foundation required that institutions submit application forms containing detailed statistics on the types and sources of support for graduate science students, as well as selected information on faculty and postdoctorals. Since 1972, after the general program was phased out and traineeship applications for support across all fields of science were no longer accepted, the Division of Science Resources Studies initiated a survey program to preserve the time series, and coverage has been expanded to cover all graduate science departments.

When the National Institutes of Health became a partner in the survey in 1973, coverage was again expanded to include all graduate departments in the clinical and medical sciences, as listed in the 1973-74 Directory of American Medical Education of the Association of American Medical Colleges. Results of the 1973 survey represent responses from 6,559 master's and doctorate departments in 339 institutions awarding science doctorate degrees, including 104 separate medical schools. See technical notes (table I-14) for department titles that were aggregated into science and engineering disciplines.

The 100-percent institutional response rate attained in both 1972 and 1973 was indicative of the intense academic interest in recent national issues concerning graduate education, and particularly in the use of statistics to examine these issues by research specialists and analysts. A ranking of all the institutions in terms of their total graduate enrollment is shown in the technical notes (table I-15).

Forms were mailed in mid-November 1973 to all graduate deans, or to the respondent named on the 1972 return. Preliminary results based on responses from 3,374 graduate departments were published in a *Science Resources Studies Highlights* in July 1974; the final statistical tables were released in October 1974 and are available upon request.[1]

Characteristics of graduate enrollment examined in this report are as follows: Enrollment status (full- and part-time); distribution among fields of science; level of study (first-year or beyond-f foreign); control of institution (public or privat Data on types and sources of major support wer only. Postdoctoral utilization by field of scienc and source of support and year of Ph.D. Deta available on a 2-year basis for every item that ap both 1972 and 1973.[2]

The statistics presented in this report were collection efforts: (1) Applications by departm traineeships from 1967 through 1971; and (2) sta and 1973 by NSF to continue the series with br Because of the shifting size of the universe from a method was devised to link the two data bas analyses. The applications for traineeships ca departments and institutions each year, so th available to provide national science and Similarly, each of the surveys of 1972 and 1973 wa departments; this increase in coverage each yea national totals. Therefore, a method was devise departments that reported consistently for thre process enabled NSF to examine short-term tre for construction of an index, using 1967 as the

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[1] See National Science Foundation, *Science Resources Studies Highlights*, "1973 Graduate Science Enrollment Down Another 2 Percent" (NSF 74-308), July 30, 1974, and *Detailed Statistical Tables, Graduate Science Education: Student Support and Postdoctorals, Fall 1973* (NSF 74-318-A), (Washington, D.C. 20550, 1974).

[2] See appendix IV for examples of 1972 and 1973 Dep

[3] See technical notes, appendix I, for the number of covered in the trend data for 1967-73.

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The statistics presented in this report were derived from two separate data-collection efforts: (1) Applications by department chairmen for NSF graduate traineeships from 1967 through 1971; and (2) statistical surveys conducted in 1972 and 1973 by NSF to continue the series with broader coverage of departments. Because of the shifting size of the universe from which these data were extracted, a method was devised to link the two data bases to produce longer term trend analyses. The applications for traineeships came from a different number of departments and institutions each year, so that absolute numbers were not available to provide national science and engineering enrollment levels. Similarly, each of the surveys of 1972 and 1973 was sent to an expanded universe of departments; this increase in coverage each year also precluded the formation of national totals. Therefore, a method was devised to examine the responses from departments that reported consistently for three or four years. This "matching" process enabled NSF to examine short-term trends, which then became the basis for construction of an index, using 1967 as the base year.[3]

Greater detail is available for the most recent period, 1972 to 1973, as every comparable item on the questionnaire was tabulated on a matched basis; e.g., enrollment status (full- and part-time); level of study (first-year and beyond-first-year); citizenship (U.S. citizens and foreign students); types and sources of support of full-time students; sex of full-time students; and the sources of support of postdoctorals. All of these items have been tabulated by field and area of science.

[2] See appendix IV for examples of 1972 and 1973 Departmental Data Sheets.

[3] See technical notes, appendix I, for the number of institutions and departments, by level, covered in the trend data for 1967-73.

# Section 1. TRENDS IN GRADUATE ENROLLMENT IN SCIENCE AND ENGI

## GENERAL CHARACTERISTICS, 1972 to 1973

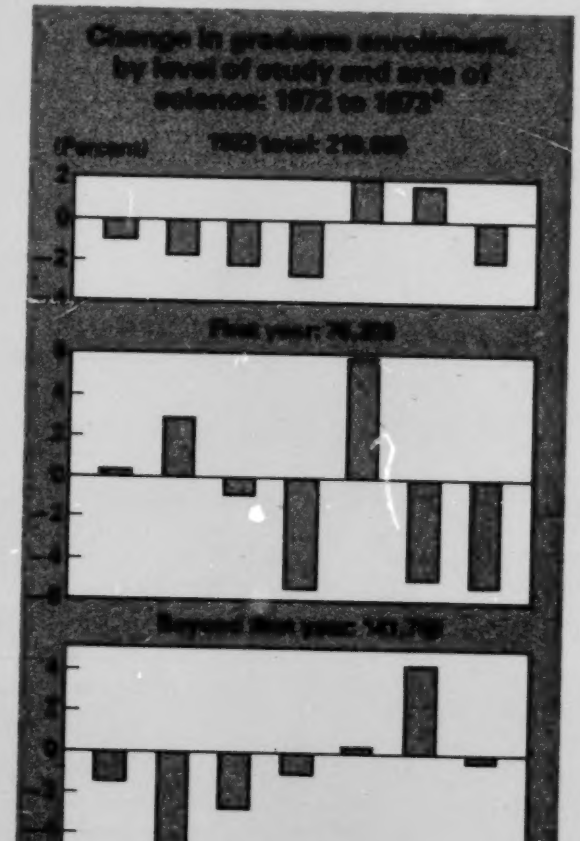
Institutions granting science Ph.D.'s reported that total graduate science enrollment declined 1 percent between 1972 and 1973, a trend that began in fall 1970. Gains in enrollment were registered in only two areas, the life sciences and psychology. This increase in interest in the life sciences, particularly in the biological sciences, was attributed by some survey respondents to its growing appeal among young adults as a means of satisfying their career aspirations. Also, many unsuccessful medical school applicants continued their education in a related field of graduate study to upgrade their academic credentials or to gain admission into an M.D. program in the future. Psychology, a professional field where advanced degrees are becoming more important and where public demand for counseling and guidance services is increasing, is attracting more undergraduate majors than ever before.[4]

[4] *The Chronicle of Higher Education.* "Will Success Spoil Psychology," September 30, 1974.

**Percent change in graduate enrollment, by area of science and enrollment status: 1972 to 1973**

| Area of science | Total | Full time | Part time |
|---|---|---|---|
| Total, all areas ..... | -1.0 | -2.5 | 4.2 |
| Engineering ..... | -1.8 | -3.3 | .8 |
| Physical sciences ..... | -2.3 | -3.5 | 6.2 |
| Mathematical sciences . | -2.7 | -4.5 | 1.8 |
| Life sciences ..... | 2.0 | -.2 | 17.7 |
| Psychology ..... | 1.7 | -1.9 | 21.7 |
| Social sciences ..... | -2.0 | -2.7 | -.1 |

NOTE: Based on 4,112 graduate departments reporting in 1972 and 1973.



# GRADUATE ENROLLMENT IN SCIENCE AND ENGINEERING

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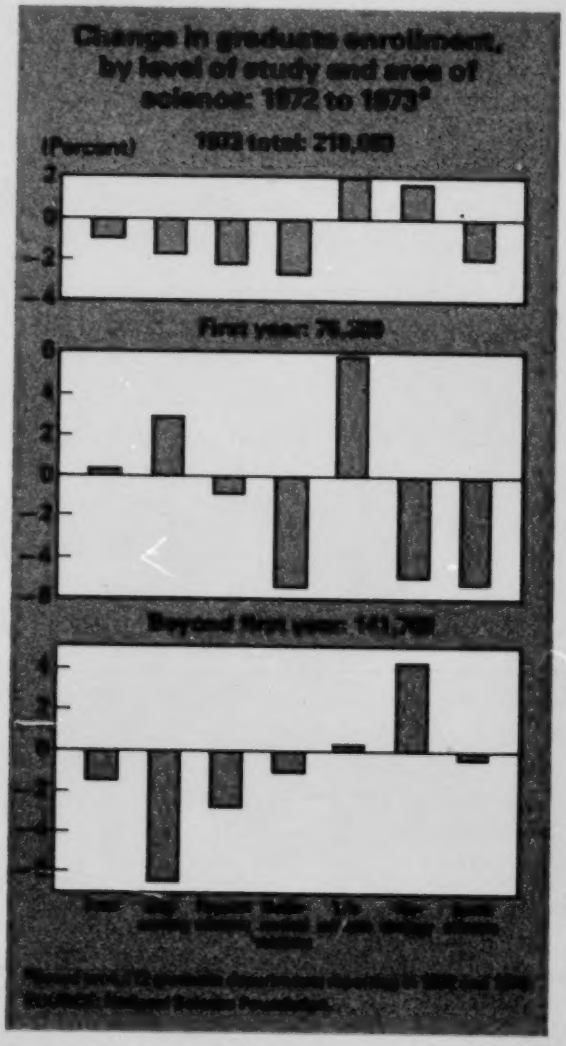
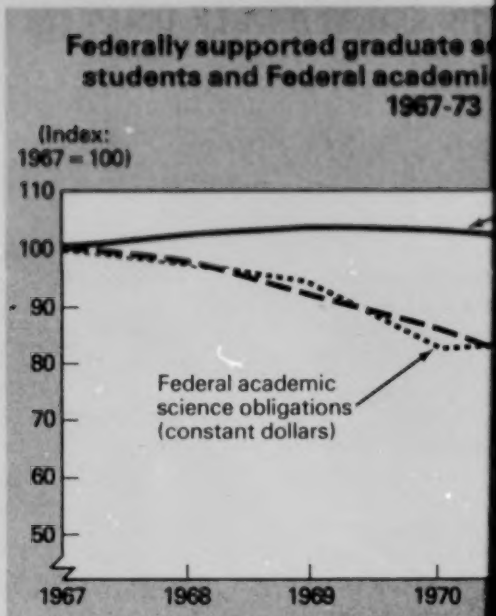


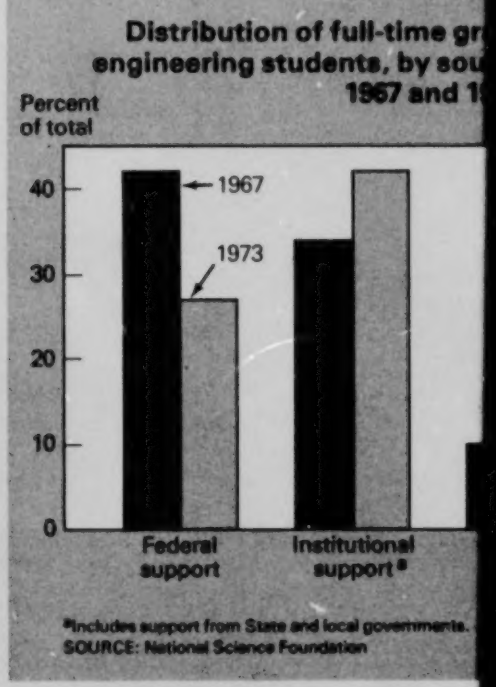

### ENROLLMENT STATUS

Every area of science lost some full-time students between 1972 and 1973, at the same time that gains were being registered in virtually every area in part-time enrollment. Increases in part-time enrollment ranged from 1 percent in engineering to 22 percent in psychology, with the social sciences the only area to register a slight loss.

### LEVEL OF STUDY

Enrollment in the first year of graduate study was up slightly from 1972 to 1973, representing a reversal which may have been influenced by changing attitudes on the part of some students who were previously "turned off" by the prospect of professional careers in certain fields of science and technology. In certain locales, university administrators reported that economic factors could be playing a major role in this turnaround, i.e., a shrinking job market for bachelor's degree holders in science-oriented positions could be a large inducement for students to stay in graduate school and obtain a more marketable degree. For instance, first-year engineering enrollment went up 5 percent from 1972 to 1973 and first-year enrollment in the life sciences went up 6 percent. Enrollment of first-year students in all other areas decreased, at rates ranging from 1 percent in the physical sciences to almost 6 percent in the mathematical sciences.




## FULL-TIME GRADUATE STUDENTS

### LONG-TERM TRENDS

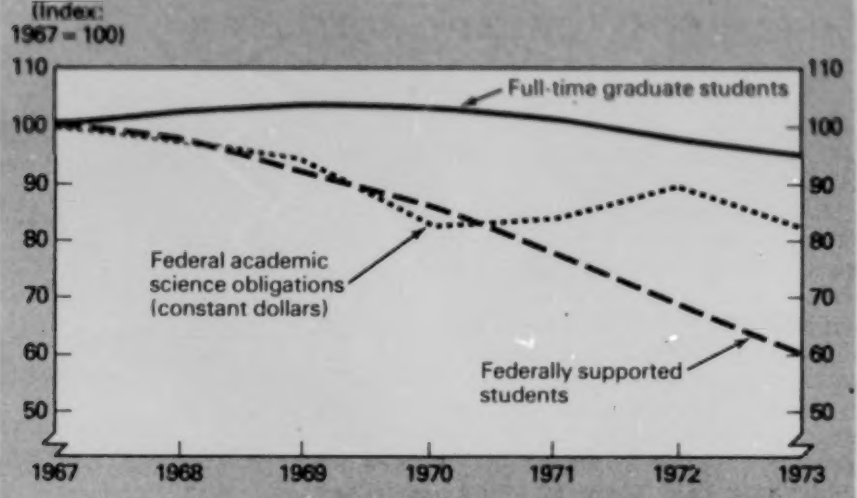
An overall decline of 5 percent in full-time enrollment in the sciences and engineering occurred during the period 1967-73. In 1973 federally supported students enrolled on a full-time basis represented only about 60 percent the level supported in 1967, while Federal academic science obligations to universities and colleges were 18 percent lower. Federal agencies provided the major source of support for only 27 percent of the 164,300 full-time students enrolled in graduate science departments in 1973, compared with 42 percent in 1967. Support from the institutions themselves, including State and local government funds, provided the principal source for 42 percent of all full-time graduate students in 1973, up considerably from the 34-percent share provided in 1967.

## STUDENTS

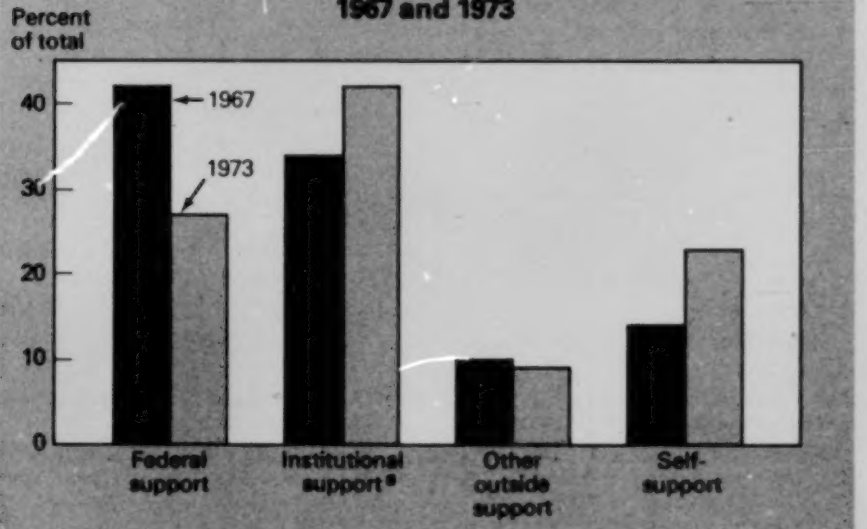
### -TERM TRENDS

t in full-time enrollment in the sciences and period 1967-73. In 1973 federally supported s represented only about 60 percent the level demic science obligations to universities and deral agencies provided the major source of 4,300 full-time students enrolled in graduate red with 42 percent in 1967. Support from the ate and local government funds, provided of all full-time graduate students in 1973, up hare provided in 1967.

**Federally supported graduate science and engineering students and Federal academic science obligations: 1967-73**



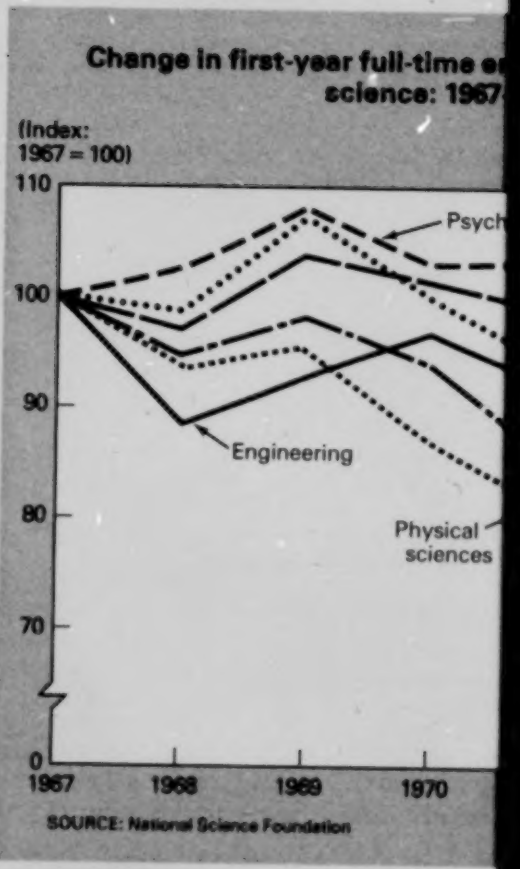

**Distribution of full-time graduate science and engineering students, by source of major support: 1967 and 1973**




*Includes support from State and local governments.
SOURCE: National Science Foundation

Trends in the number of first-year entrants into major areas of science over the 1967-73 period are shown in the chart. While recognizing that a significant number of these first-year students will receive terminal master's degrees either by design or as the result of economic factors at the time of decision, these data are considered by many to be the best indicator of the future supply of Ph.D.'s. Data on 1973 doctorate-degree recipients from the Survey of Earned Doctorates that is conducted annually by the Commission on Human Resources of the National Research Council indicate that the median time lapse from year of baccalaureate to year of doctorate in all science fields was 7.3 years.[5] During this time span, students frequently change their career aspirations and drop out of graduate school, so that first-year enrollment as a measure of future Ph.D. output must be utilized with caution.

As shown graphically, no area of science enrolled a higher level of first-year students in 1973 than in 1967. First-year enrollment was on the increase from 1967 to 1969 in only three areas of science: psychology, life, and the social sciences. By 1973 psychology and life science majors were 3 percent below their 1967 level; first-year entrants into the social sciences were 20 percent below. Life science and engineering entrants appear to be reversing this trend; these were the only areas to show an upward swing between 1972 and 1973.




[5] See National Academy of Sciences, *Summary Report: 1973 Doctorate Recipients from United States Universities*, (Washington, D.C., May 1974), table 2.

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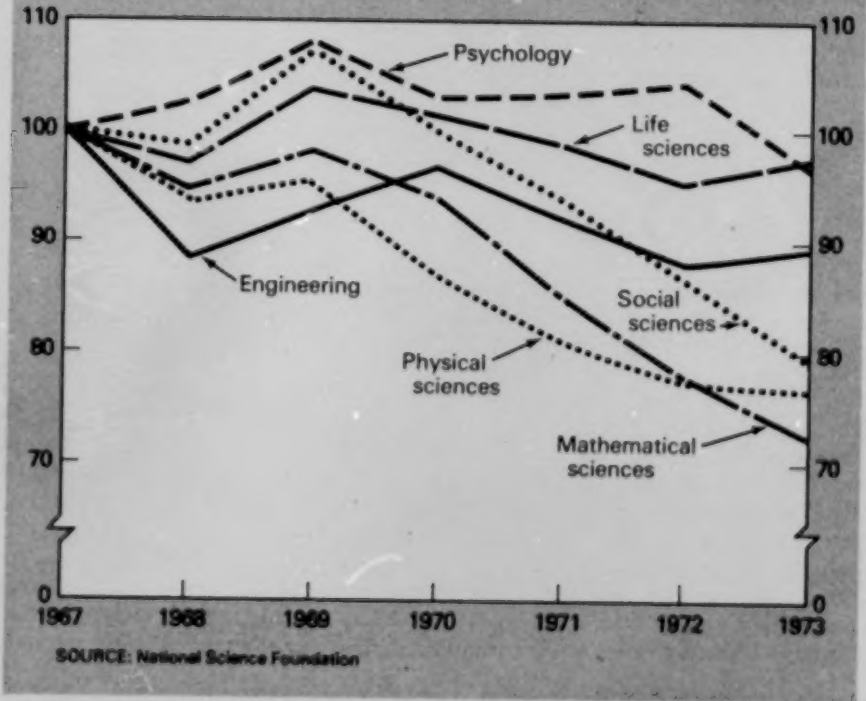
**Change in first-year full-time enrollment, by area of science: 1967-73**




SOURCE: National Science Foundation

### SHORT-TERM TRENDS

Every item on the 1973 questionnaire was compared with its 1972 counterpart for departments that reported in both surveys.[6] In this set of matched departments, both sources and types of major support were analyzed according to fields of science, type of control of the institution, level of study, and citizenship.

## Source of Major Support

The shift in funding patterns described earlier was apparent in both the long- and short-term periods analyzed. While Federal support to students dropped by 13 percent from 1972 to 1973, the institutions themselves, as well as State and local governments, increased their support by almost 6 percent in every area of science. Other outside support—from industrial, private, and foreign sources—rose over 2 percent. For the first time in several years, however, the number of self-supported students declined. Both public and private institutions were affected by the slackening of Federal support, with the former losing slightly more in percentage terms than the latter. Therefore, compared to public institutions, private institutions were evidently in a better short-term financial position to increase their contribution to student support from endowment and other non-Federal sources. In addition, enrollment of self-supported students dropped more than twice as fast in public as in private universities.

[6] See appendix IV for examples of both forms.

**Percent change in full-time graduate enrollment in matched departments, by source of major support and area of science: 1972 to 1973**

| Source of major support | Total | Engineering | Physical sciences | Mathematical sciences | Life sciences | Psychology | Social sciences |
|---|---|---|---|---|---|---|---|
| Total | -2.5 | -3.3 | -3.5 | -4.5 | -.2 | -1.9 | -2.7 |
| U.S. Government | -13.2 | -8.8 | -12.5 | -19.4 | -15.0 | -15.4 | -15.3 |
| Institutional support | 5.6 | 5.7 | 3.5 | 2.3 | 8.8 | 7.9 | 5.7 |
| Other outside support | 2.4 | 7.9 | -6.3 | 13.1 | 7.9 | 4.4 | -8.0 |
| Self-support | -4.5 | -10.2 | -4.9 | -14.0 | 4.7 | -.2 | -4.5 |

NOTE: Based on 4,112 graduate departments reporting in 1972 and 1973.





The ability of institutions, especially p
increase student aid from their own assets
appears to be limited. The value of endow
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have been declining. Since the institutions
financial conditions due to declining rates o
inflation, there are indications that tuition fo
increase significantly in the near future.

**Percent change in full-t
enrollment in matched depa
of major support and cont
1972 to 197**

| Source of major support | Total |
|---|---|
| Total | -2.5 |
| U.S. Government | -13.2 |
| Institutional support | 5.6 |
| Other outside support | 2.4 |
| Self-support | -4.5 |

NOTE: Based on 4,112 graduate dep
and 1973.

RM TRENDS

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The ability of institutions, especially private universities, to continue to increase student aid from their own assets without large increases in tuition appears to be limited. The value of endowments and the amount of private contributions are influenced significantly by market conditions, which, of course, have been declining. Since the institutions also are confronted with adverse financial conditions due to declining rates of enrollment and rising costs due to inflation, there are indications that tuition for admission to graduate school may increase significantly in the near future.

**e enrollment in matched departments, nd area of science: 1972 to 1973**

| hysical iences | Mathe-matical sciences | Life sciences | Psy-chology | Social sciences |
|---|---|---|---|---|
| -3.5 | -4.5 | -.2 | -1.9 | -2.7 |
| -12.5 | -19.4 | -15.0 | -15.4 | -15.3 |
| 3.5 | 2.3 | 8.8 | 7.9 | 5.7 |
| -6.3 | 13.1 | 7.9 | 4.4 | -8.0 |
| -4.9 | 14.0 | 4.7 | -.2 | -4.5 |

eporting in 1972 and 1973.

**Percent change in full-time graduate enrollment in matched departments, by source of major support and control of institution: 1972 to 1973**

| Source of major support | Total | Control of institution | |
|---|---|---|---|
| | | Public | Private |
| Total | -2.5 | -2.7 | -1.8 |
| U.S. Government | -13.2 | -13.5 | -12.5 |
| Institutional support | 5.6 | 4.4 | 9.9 |
| Other outside support | 2.4 | 4.8 | -2.0 |
| Self-support | -4.5 | -5.3 | -2.0 |

NOTE: Based on 4,112 graduate departments reporting in 1972 and 1973.

## Type of Major Support

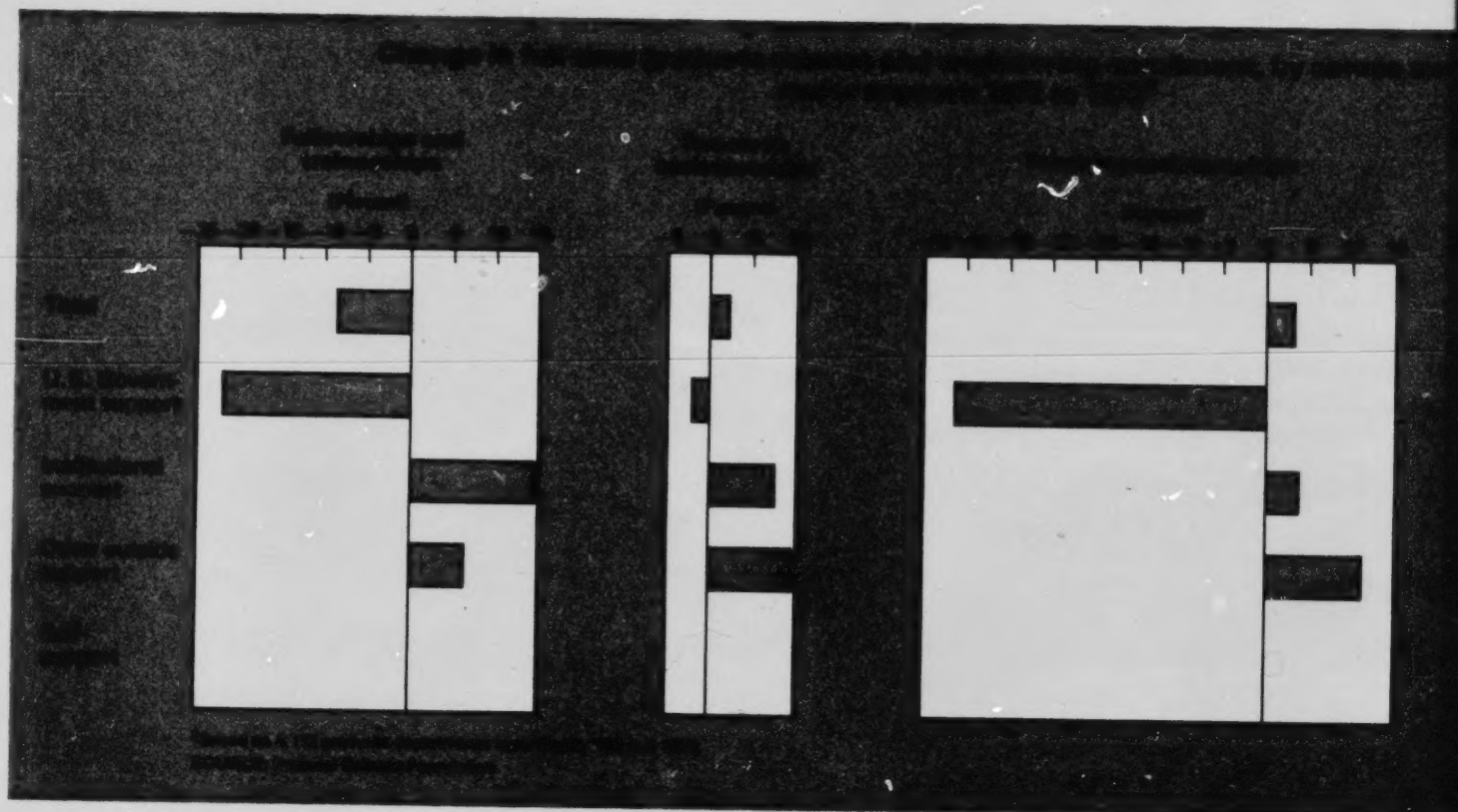
Four mechanisms of support were itemized on the questionnaire: fellowships-traineeships, research assistantships, teaching assistantships, and "other" types. For definitions of each mechanism, refer to the technical notes.

Each of the four types of support mechanisms utilized by full-time students was affected by the curtailment of Federal programs, with research assistantships being the least affected. Increases in institutional support also influenced each category, but primarily those holding fellowships and traineeships. Other sources of outside support, such as industry and private foundations, also led to increases in all mechanisms with the exception of "other" types.

### CONTROL OF INSTITU

When support mechanisms were examined institution in which students were enrolled, fe public universities dropped at almost twice the Research assistants fared about the same in assistantships increased at over twice the rate i

- These changes were examined in each area that fellowship-traineeship support in pub highest rate in the physical sciences, a mathematical sciences. The drop in private trainees was also highest in the physical sc sciences.



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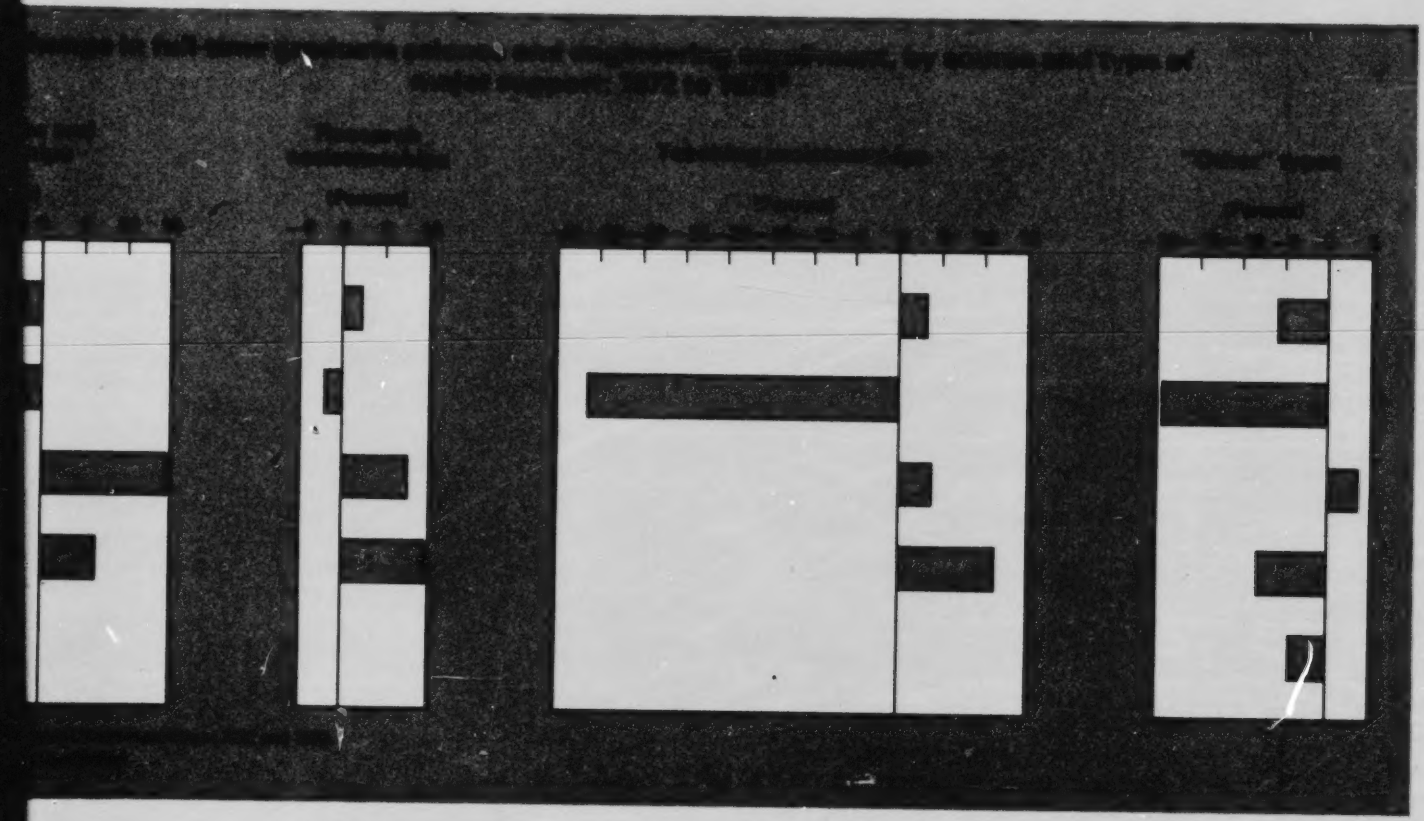
rt mechanisms utilized by full-time students ederal programs, with research assistantships n institutional support also influenced each g fellowships and traineeships. Other sources and private foundations, also led to increases on of "other" types.

## CONTROL OF INSTITUTIONS

When support mechanisms were examined in terms of the control of the institution in which students were enrolled, fellowship-traineeship holders in public universities dropped at almost twice the rate as those in private schools. Research assistants fared about the same in both sectors, while teaching assistantships increased at over twice the rate in private as public institutions.

- These changes were examined in each area of science, where it was found that fellowship-traineeship support in public universities dropped at the highest rate in the physical sciences, and at the lowest rate in the mathematical sciences. The drop in private university support to fellows-trainees was also highest in the physical sciences, but lowest in the social sciences.



- Research assistantship support was up in both public and private sectors as stated earlier, but both the physical and mathematical sciences lost students dependent on this mechanism, while all other sciences gained.

- Each area of science reflected higher levels of teaching assistantship support, with private universities boosting this support at the highest rate in all fields.

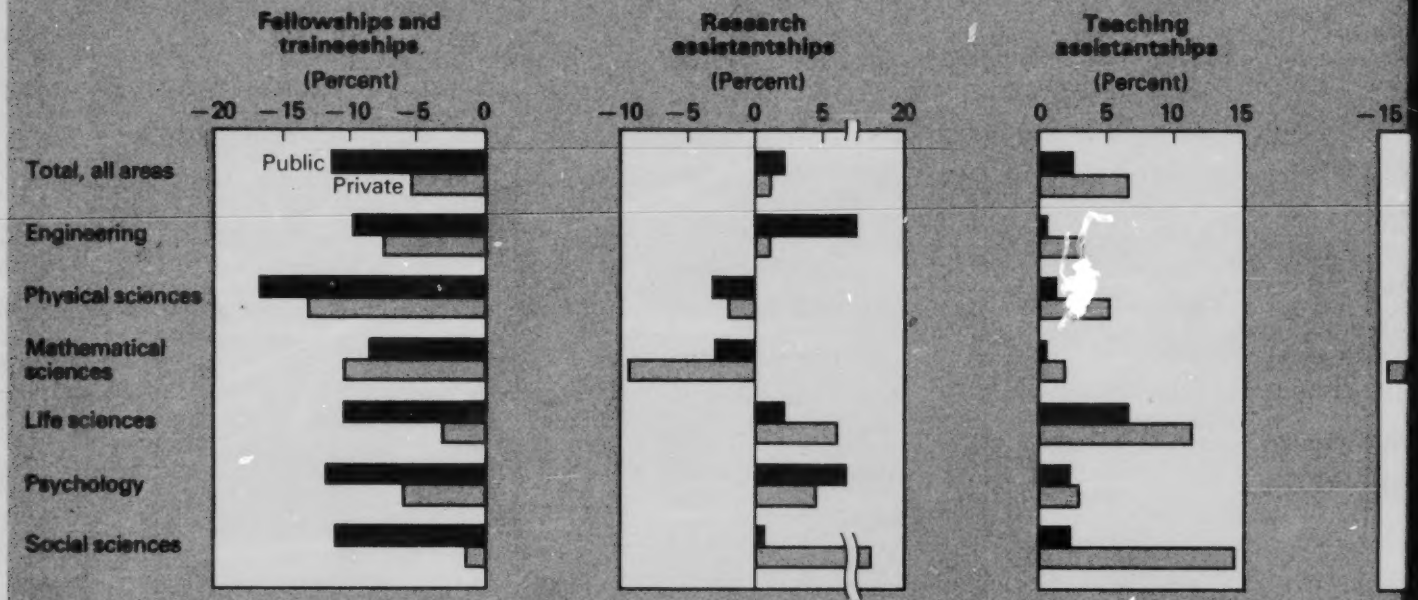
- Neither the public nor the private sector saw an increase in "other" types of support, primarily self-support. In this group, reductions were felt in every area of science except psychology, where a gain of over 20 percent was registered in institutions under private control.

**Percent change in full-time g in matched departments, by ty and control of institutio**

| Type of major support | Tot |
|---|---|
| Total | -2. |
| Fellowships and traineeships | -8. |
| Research assistantships | 1. |
| Teaching assistantships | 3. |
| Other types of support | -5. |

NOTE; Based on 4,112 graduate dep and 1973.

**Change in full-time graduate enrollment, by area of science, type of major s control of institution: 1972 to 1973[a]**




[a]Based on 4,112 graduate departments reporting in 1972 and 1973.
[b]Less than 0.5 percent change.
SOURCE: National Science Foundation

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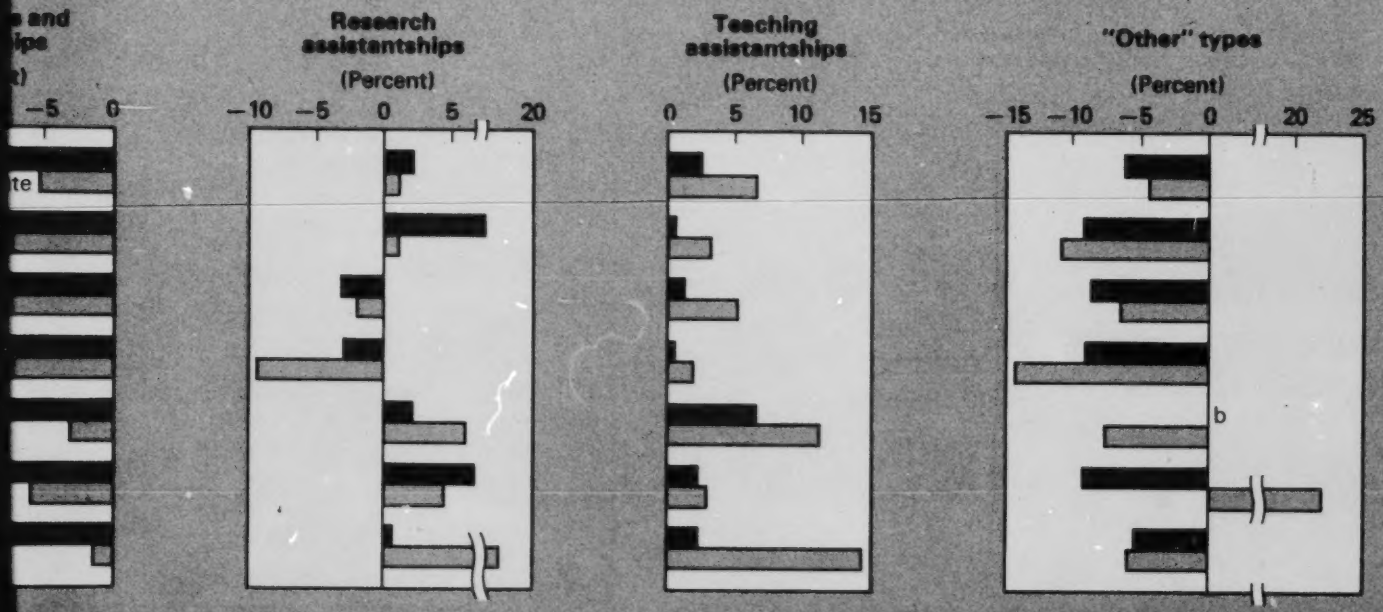
private control.

**Percent change in full-time graduate enrollment in matched departments, by type of major support and control of institution: 1972 to 1973**

| Type of major support | Total | Control of institution | |
|---|---|---|---|
| | | Public | Private |
| Total | -2.5 | -2.7 | -1.8 |
| Fellowships and traineeships | -8.9 | -11.3 | -5.6 |
| Research assistantships | 1.9 | 2.1 | 1.1 |
| Teaching assistantships | 3.1 | 2.4 | 6.5 |
| Other types of support | -5.8 | -6.2 | -4.6 |

NOTE: Based on 4,112 graduate departments reporting in 1972 and 1973.

**Change in full-time graduate enrollment, by area of science, type of major support, and control of institution: 1972 to 1973[a]**




departments reporting in 1972 and 1973.
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## Level of Study

The 1-percent decrease between 1972 and 1973 in numbers of full-time first-year students and the 3-percent decline in those studying beyond their first year were examined in terms of the mechanisms utilized for their support. The increase in first-year research and teaching assistantships partially offset the losses in fellows-trainees and those dependent on "other" mechanisms who entered graduate work for the first time.

## Citizenship

The number of foreign graduate students continued to decline, although the rate slowed to about the same as that of U.S. citizens. Unlike U.S. citizens, foreign students actually received more fellowships and traineeships in 1973 than in 1972, and fewer research assistantships. However, the number who were dependent on "other" mechanisms—primarily self-support—dropped at a faster rate than did U.S. citizens.

Psychology was the only area of science to show an increase in foreign student enrollment. All other areas showed decreases at approximately the same relative level as that of U.S. citizens. However, full-time enrollment of U.S. citizens in the life sciences remained steady, while foreign student enrollment dropped 2 percent.

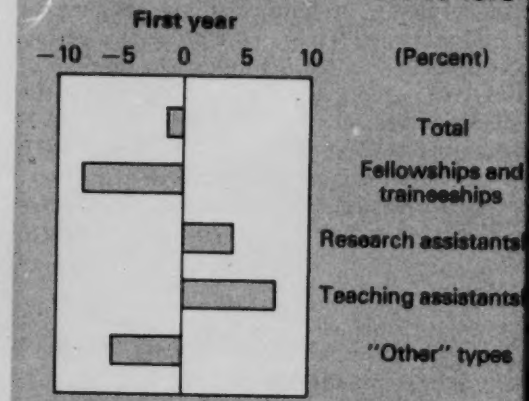
**Percent change in full-time graduate enrollment in matched departments, by area of science and citizenship: 1972 to 1973**

| Area of science | Total | U.S. citizens | Foreign students |
|---|---|---|---|
| Total, all areas | -2.5 | -2.6 | -2.0 |
| Engineering | -3.3 | -3.1 | -3.5 |
| Physical sciences | -3.5 | -3.6 | -2.8 |
| Mathematical sciences | -4.5 | -4.8 | -3.2 |
| Life sciences | -.2 | .1 | -2.0 |
| Psychology | -1.9 | -3.4 | 41.9 |
| Social sciences | -2.7 | -2.9 | -1.5 |

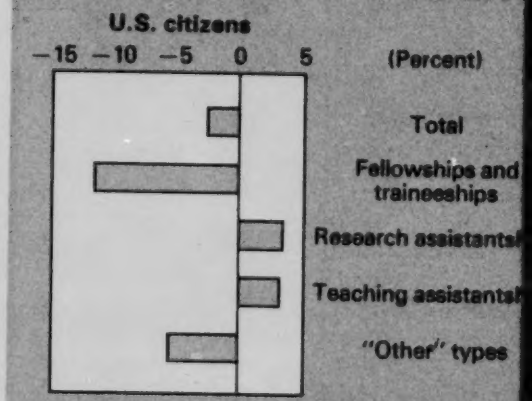
NOTE: Based on 4,112 graduate departments reporting in 1972 and 1973.

Some institutions have restricted enrollmen order to admit more U.S. citizens. Also, due t Federal visa restrictions were recently imposed student's financial means to pay for the entire

**Change in full-time graduate scie enrollment, by level of study and t 1972 to 1973[a]**




**Change in full-time graduate scie enrollment, by citizenship and ty 1972 to 1973[a]**

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| | Total | U.S. citizens | Foreign students |
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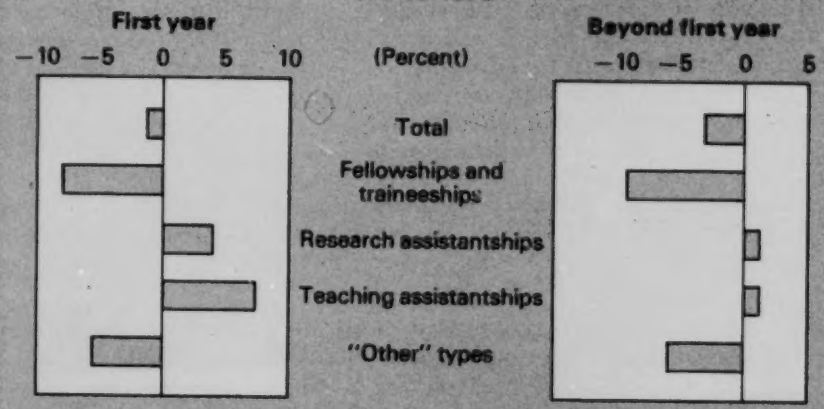
| .. | -3.5 | -3.6 | -2.8 |
| .. | -4.5 | -4.8 | -3.2 |
| .. | -.2 | .1 | -2.0 |
| .. | -1.9 | -3.4 | 41.9 |
| .. | -2.7 | -2.9 | -1.5 |

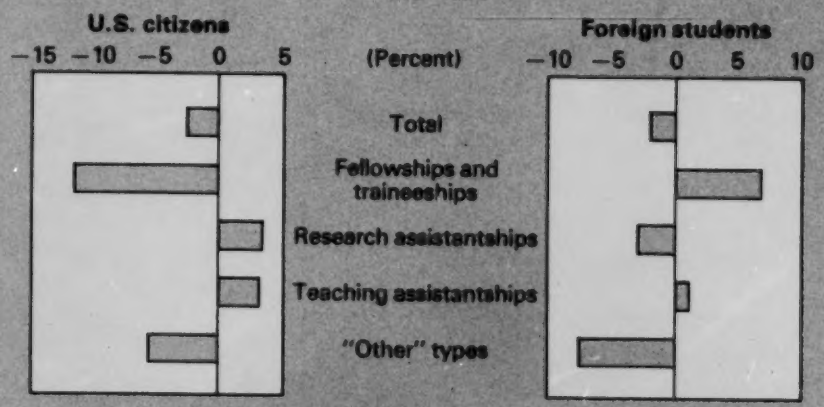
te departments reporting in 1972

Some institutions have restricted enrollment of foreign graduate students in order to admit more U.S. citizens. Also, due to tight labor market conditions, Federal visa restrictions were recently imposed that require proof of the foreign student's financial means to pay for the entire period of study.

**Change in full-time graduate science and engineering enrollment, by level of study and type of major support: 1972 to 1973[a]**




**Change in full-time graduate science and engineering enrollment, by citizenship and type of major support: 1972 to 1973[a]**

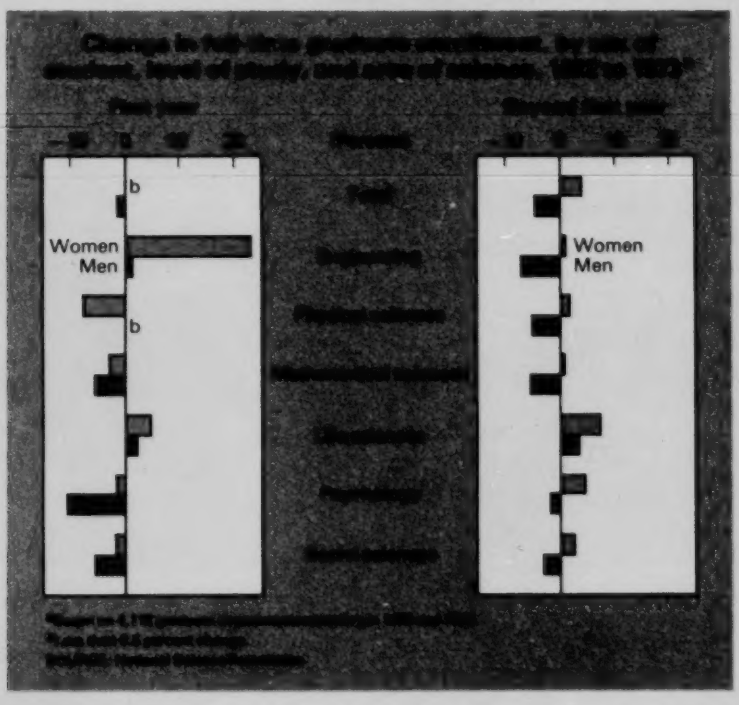



[a]Based on 4,112 graduate departments reporting in 1972 and 1973.
SOURCE: National Science Foundation

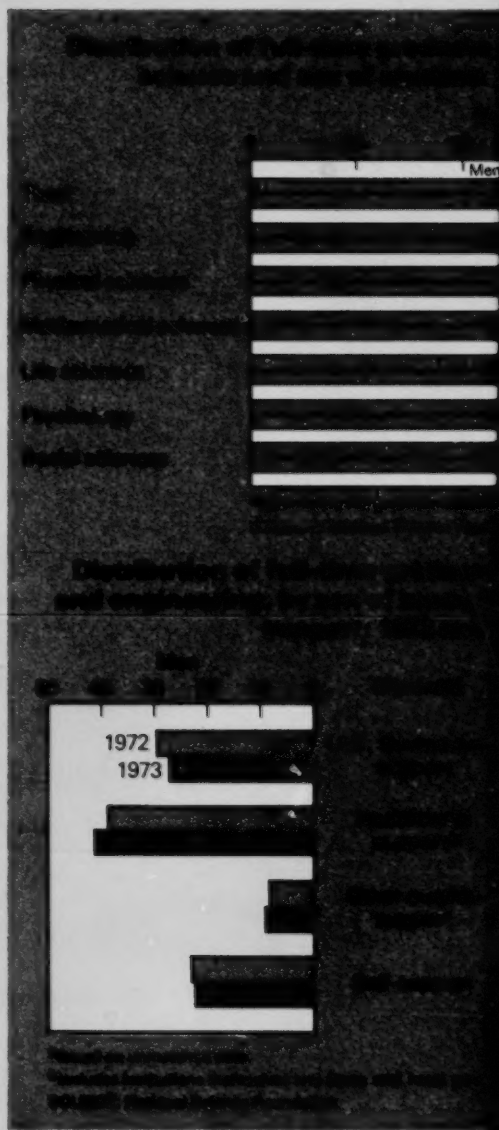
## Sex of Graduate Students

Separate statistics on major sources of support and on level of graduate study were collected in this survey for men and women enrolled on a full-time basis. From 1972 to 1973, the enrollment of male full-time graduate science students declined 4 percent, dropping in every area of science. The number of women graduate students, on the other hand, increased in engineering, psychology, and the life and social sciences. Declines in the rate of enrollment of women occurred in only two areas, the physical and mathematical sciences.

First-year enrollment of male graduate students increased slightly in engineering and the life sciences and remained stable in the physical sciences, reflecting better prospects for job opportunities in these fields. The number of male students attending beyond their first year dropped in every area except the life sciences. Women first-year students entered graduate engineering studies at the highest rate experienced to date, over 20 percent more in 1973 than in 1972, but they still accounted for less than 5 percent of all engineering graduate students. In every area of science, the proportion of women graduate students has risen slightly over 1972, with the greatest proportional increase occurring in psychology.




The general drop in federally supported f
women equally between 1972 and 1973 and bo
support. The distribution of all sources of supp
both men and women in both years.



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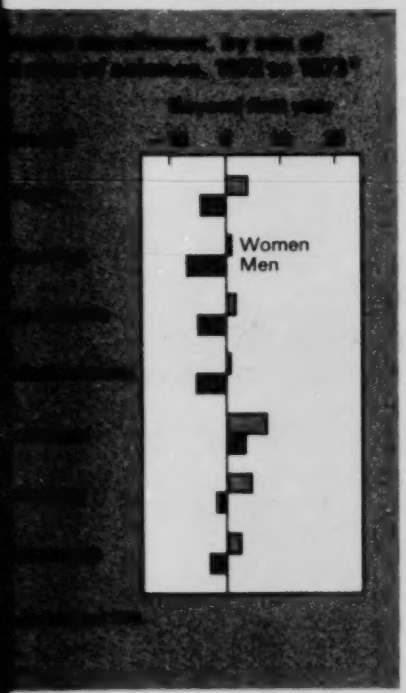
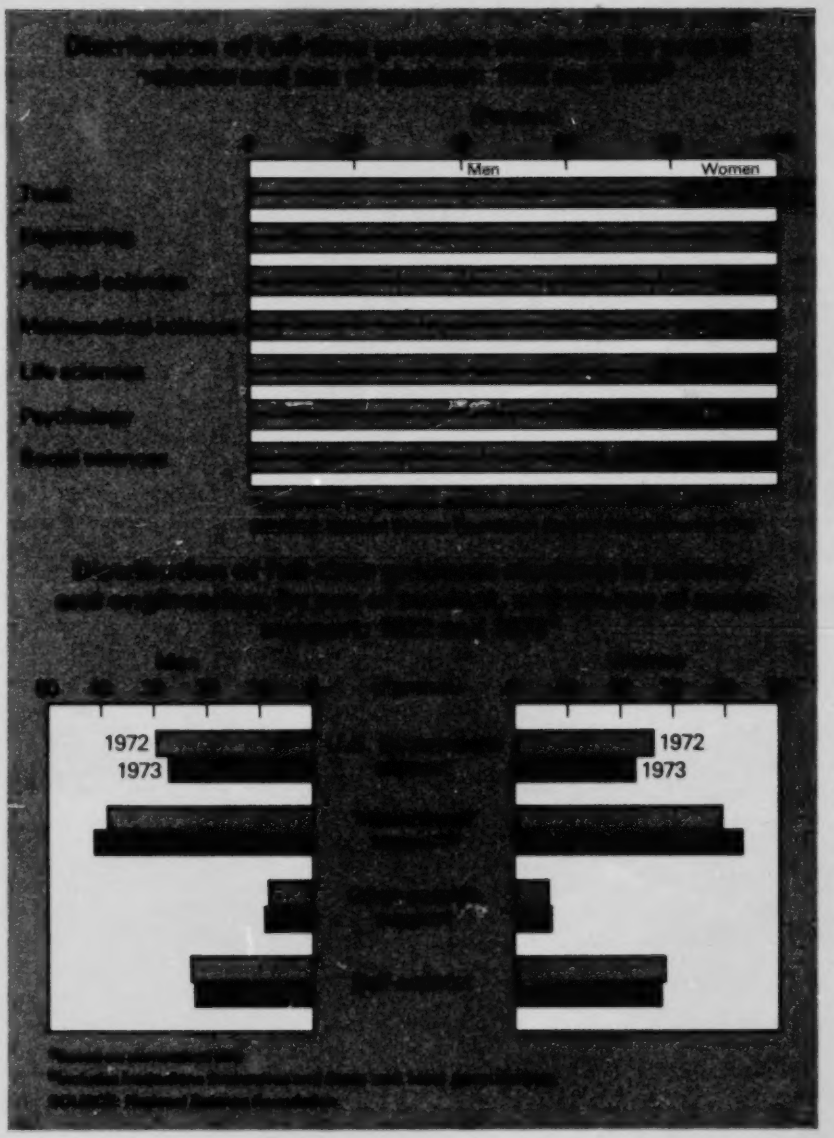





The general drop in federally supported full-time students affected men and women equally between 1972 and 1973 and both received increased institutional support. The distribution of all sources of support remained virtually the same for both men and women in both years.



## Type of Institution

As in all previous reports, graduate institutions were classified into four major categories: (1) The "first 20," referring to those selected by the largest number of graduate student applicants for NSF fellowships during 1968-73; (2) the 85 "developing" institutions, those that granted science Ph.D.'s for the first time beginning in 1960-61; (3) the 104 medical schools granting doctorates in science; and (4) all the 130 remaining institutions, classified for this purpose as "intermediate." Full-time enrollment was calculated for each of these categories, by area of science and level of study. Because graduate students enrolled in medical schools accounted for only 7,400 out of the 147,300 full-time students in matched departments, or only 5 percent, this category does not appear on the accompanying chart. In later surveys, as survey coverage of clinical-medical departments is expanded, data will be analyzed and illustrated more fully.

In 1973 the "first 20" institutions attracted 2
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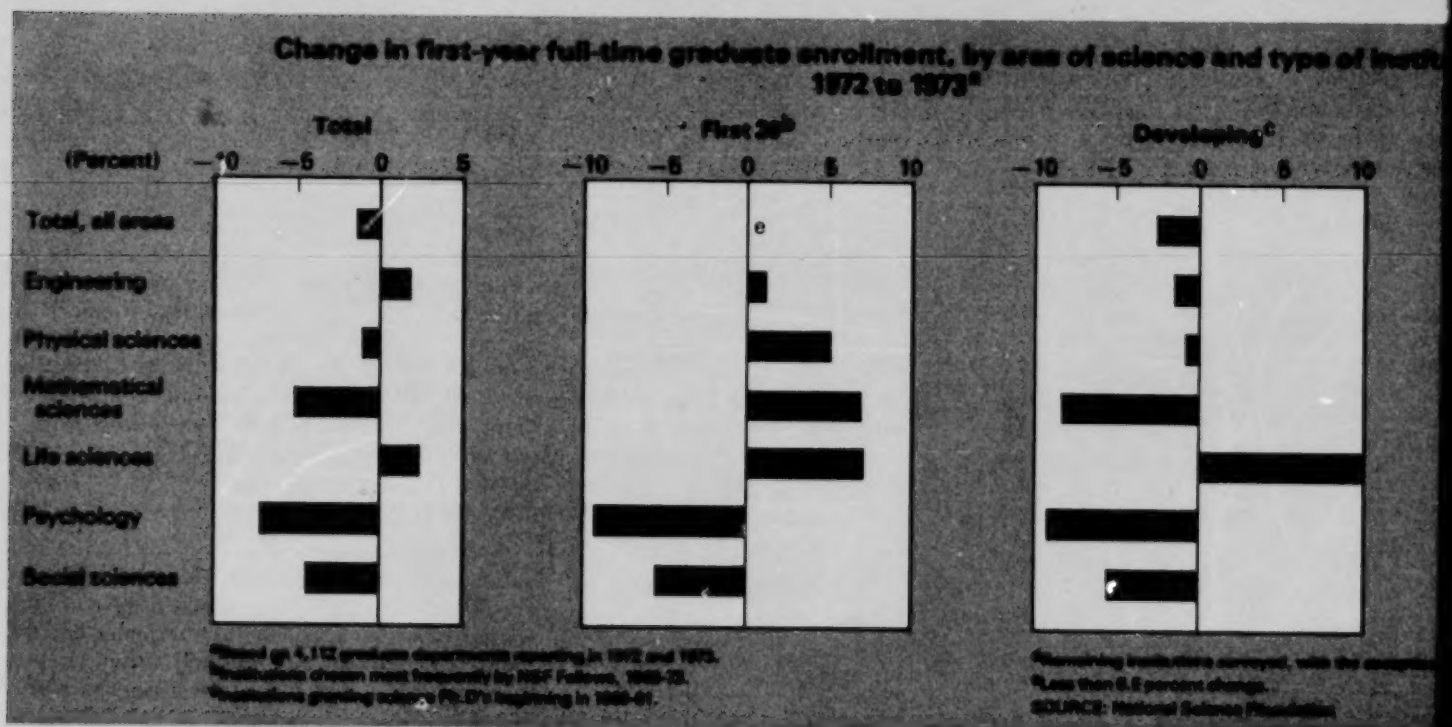

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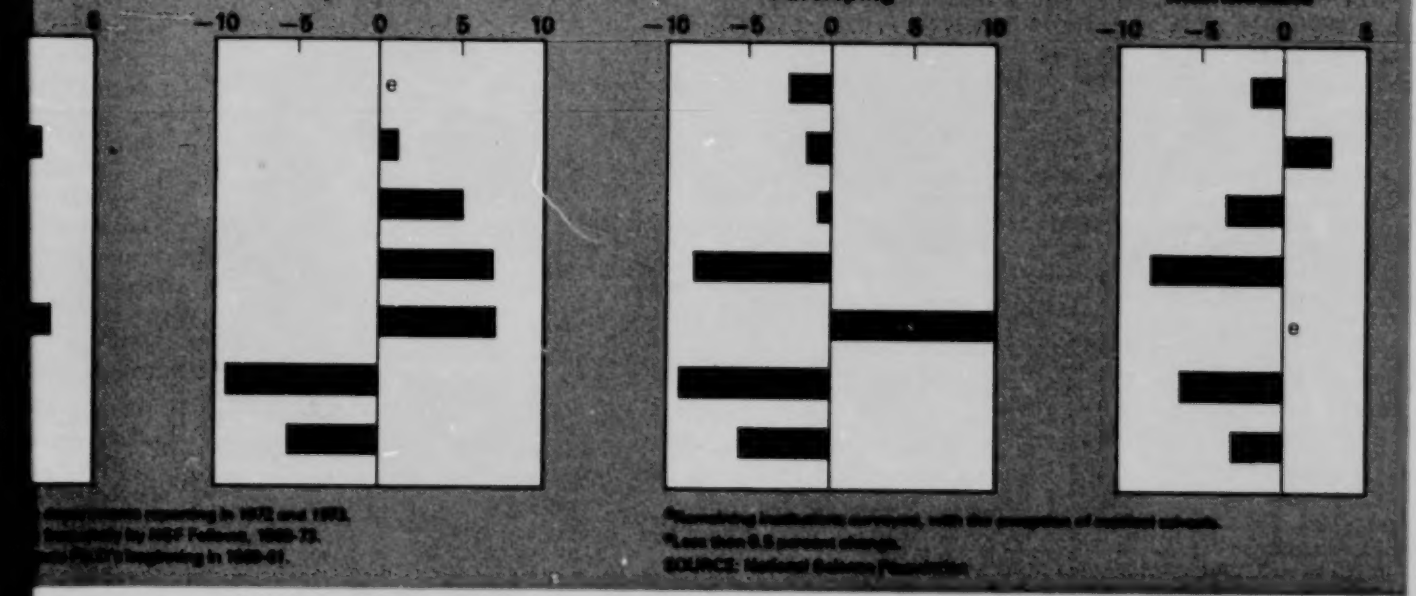
In 1973 the "first 20" institutions attracted 2 percent fewer full-time students than in 1972, while "developing" institutions enrolled about the same as in 1972, and "intermediates" almost 4 percent less. The first-year segment of enrollment in the "first 20" group actually remained at slightly above the 1972 total, with enrollment gains evident in all areas except psychology and the social sciences.

The drop in first-year full-time enrollment in "developing" schools was offset by a 2-percent increase in the number of students attending beyond their first year. Only the life sciences enrolled more first-year students in 1973 than in 1972 in these developing institutions; all other sciences showed decreases. The "intermediate" institutions enrolled 2 percent fewer first-year students between 1972 and 1973.

first-year full-time graduate enrollment, by area of science and type of institution: 1972 to 1973[a]




[a] ... reporting in 1972 and 1973.
... by NSF Fellows, 1968-73.
... beginning in 1969-81.

[c] ... surveyed, with the exception of medical schools.
[d] Less than 0.5 percent change.
SOURCE: National Science Foundation

## Level of Department

The matched doctorate departments enrolled over 141,200 full-time students in 1973, or a decrease of 3 percent from the 1972 total; however, master's departments enrolled about 9,800 full-time students, up almost 6 percent from 1972. The decrease in doctorate department enrollment occurred in every area of science; in master's departments, only the physical sciences and psychology showed decreases. The shift in enrollment between doctorate and master's departments is indicative of the growing tendency of students to enroll in fields where less emphasis is placed on Ph.D. degrees for positions after graduation.

**Percent change in full-time graduate enrollment in matched departments, by area of science and level of department: 1972 to 1973**

| Area of science | All graduate departments | Master's | Doctorate |
|---|---|---|---|
| Total, all areas | -2.5 | 5.6 | -3.0 |
| Engineering | -3.3 | 5.9 | -3.8 |
| Physical sciences | -3.5 | -3.7 | -3.5 |
| Mathematical sciences | -4.5 | 16.6 | -6.3 |
| Life sciences | -.2 | 2.1 | -.3 |
| Psychology | -1.9 | -6.8 | -1.5 |
| Social sciences | -2.7 | 10.8 | -4.2 |

NOTE: Based on 4,112 graduate departments reporting in 1972 and 1973.



## Graduate De
## Schools

Because of th
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| aster's | Doctorate |
|---|---|
| 5.6 | -3.0 |
| 5.9 | -3.8 |
| 3.7 | -3.5 |
| 6.6 | -6.3 |
| 2.1 | -.3 |
| 6.8 | -1.5 |
| 0.8 | -4.2 |

reporting in 1972



## Graduate Departments in Medical Schools

Because of the expansion of survey coverage between 1972 and 1973, as described in the technical notes, trend data in enrollment and support in the basic and clinical-medical departments can only be based on a limited number of departments for which data were supplied in both years. Graduate enrollment in these matched departments represents only 64 percent of the total reported, and therefore, trends discussed here should be viewed in the light of possible statistical bias due to this undercoverage.

Total graduate enrollment in medical schools increased 3 percent between 1972 and 1973, while enrollment in all graduate institutions combined waned. Full-time enrollment increased at a slightly higher rate than did part time, and students beyond their first year accounted for the major share of the increase.

**Graduate enrollment in medical schools, by level of study and enrollment status: 1972 to 1973**

| Level of study and enrollment status | 1972 | 1973 | Percent change |
|---|---|---|---|
| Total | 7,905 | 8,133 | 2.9 |
| Full time | 7,164 | 7,377 | 3.0 |
| Part time | 741 | 756 | 2.0 |
| First year | 2,413 | 2,406 | (1) |
| Full time | 2,148 | 2,169 | 1.0 |
| Part time | 265 | 237 | -10.6 |
| Beyond first year | 5,492 | 5,727 | 4.3 |
| Full time | 5,016 | 5,208 | 3.8 |
| Part time | 476 | 519 | 9.0 |

NOTE: Matched data represent approximately 64 percent of total graduate enrollment in medical schools for the years 1972 and 1973.
[1] Less than 0.5 percent.

Full-time students relied heavily on institutional and self-support, which increased 27 percent and 20 percent, respectively, from 1972 to 1973. Federally supported students, who accounted for 3,400 of the 7,400 full-time students in matched departments, declined by 12 percent, attributable in large part to the National Institutes of Health (NIH) cutbacks in fellowships and training grants. Between fiscal years 1972 and 1973, NIH obligations were reduced by $41 million; nevertheless, NIH remained the chief Federal agency responsible for support of graduate education in medical schools, providing aid to 54 percent of the students receiving some form of Federal support.[7] Between 1972 and 1973, NIH supported 17 percent fewer full-time graduate students in medical schools.

[7] See National Science Foundation, *Federal Support to Universities, Colleges and Selected Nonprofit Institutions, Fiscal Year 1973* (NSF 75-305) (Washington, D.C. 20402: Supt. of Documents, U.S. Government Printing Office, 1975).

The increase i
every mechanism
affected every
assistantships. Th
Federal support,
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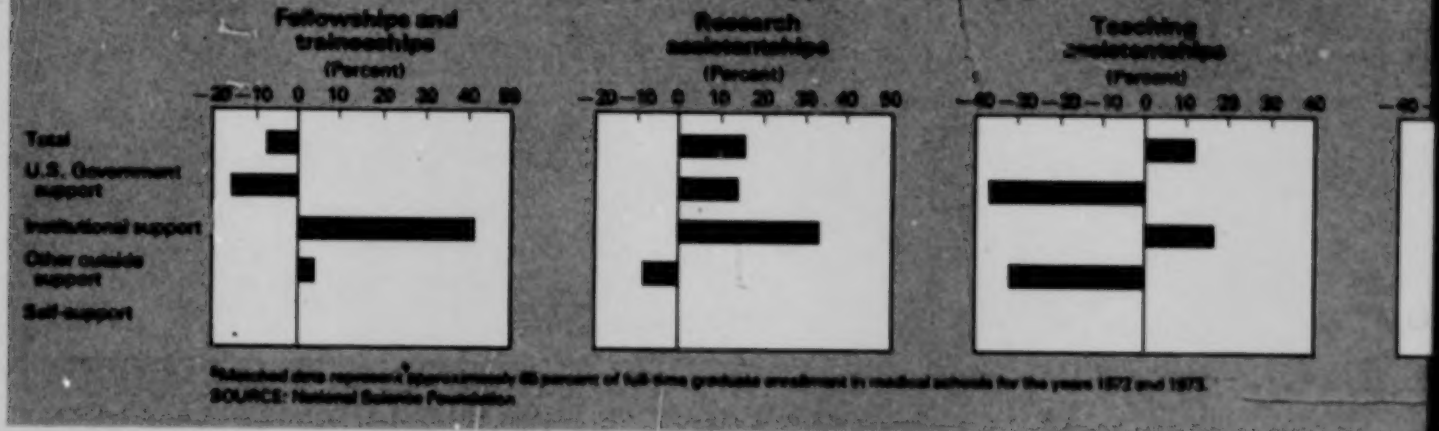
in every support
traineeships.

**Full-tim
in medical scho**

| Source of major s |
|---|
| Total |
| U.S. Government sup |
| Institutional support |
| Other outside suppor |
| Self-support |

NOTE: Matched data
full-time graduate en
1972 and 1973.

**Change in full-time graduate enrollment in medical schools, by type and source of m support: 1972 to 1973[1]**




[1] Matched data represent approximately 65 percent of full-time graduate enrollment in medical schools for the years 1972 and 1973.
SOURCE: National Science Foundation

**schools, t status:**

| 1973 | Percent change |
|---|---|
| 8,133 | 2.9 |
| 7,377 | 3.0 |
| [illegible]726 | 2.0 |
| 2,406 | (1) |
| 2,169 | 1.0 |
| 237 | -10.6 |
| 5,727 | 4.3 |
| 5,208 | 3.8 |
| 519 | 9.0 |

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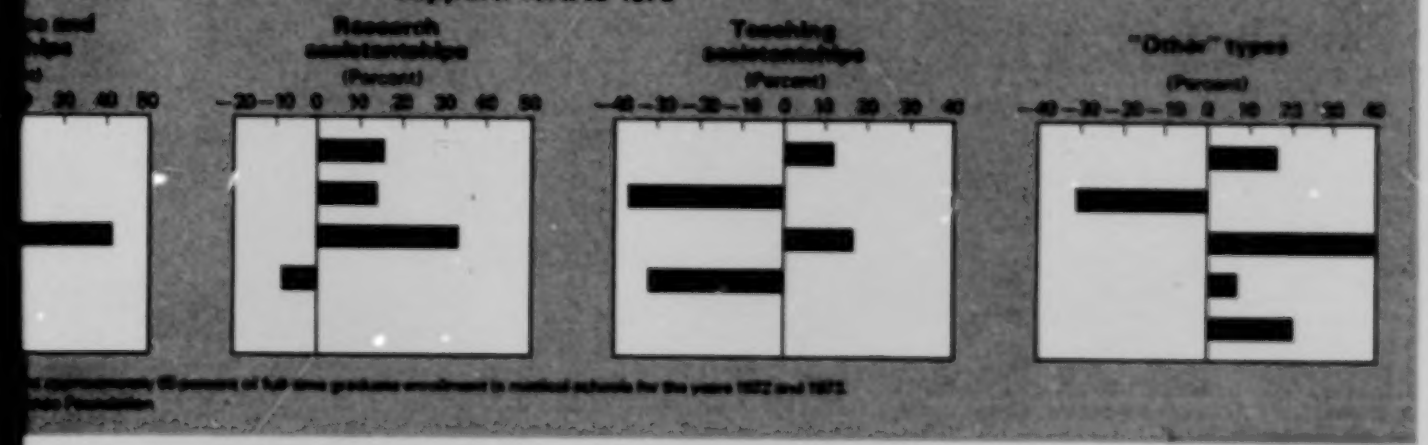
The increase in institutional support affected every mechanism; the decrease in Federal aid affected every mechanism except research assistantships. The net result of the decline in Federal support, offset by an increase in institutional and self-support, was an overall increase in every support mechanism except fellowships-traineeships.

**Full-time graduate enrollment in medical schools, by source of major support: 1972 to 1973**

| Source of major support | 1972 | 1973 | Percent change |
|---|---|---|---|
| Total | 7,164 | 7,377 | 3.0 |
| U.S. Government support | 3,889 | 3,418 | -12.1 |
| Institutional support | 1,676 | 2,135 | 27.4 |
| Other outside support | 483 | 483 | 0 |
| Self-support | 1,116 | 1,341 | 20.2 |

NOTE: Matched data represent approximately 65 percent of the full-time graduate enrollment in medical schools for the years 1972 and 1973.

**in full-time graduate enrollment in medical schools, by type and source of major support: 1972 to 1973[8]**



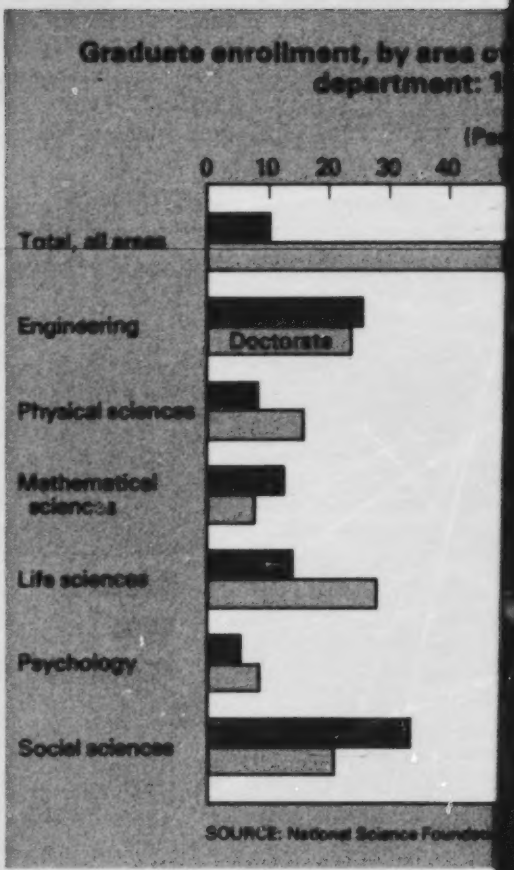
# Section 2. FALL 1973 CHARACTERISTICS

## GRADUATE ENROLLMENT

The 339 doctorate-granting institutions surveyed in 1973 enrolled almost 218,000 graduate students in 6,559 science depar ents. Three-fourths of these students attended classes on a full-time basis and almost 90 percent of the total were enrolled in doctorate-level departments. Within departments offering the master's as the highest degree program, a greater proportion of students attended part time, were in their first year of study, and were enrolled in public institutions. Also, students majoring in engineering, and the mathematical and social sciences were more likely to be enrolled in master's departments.

**Characteristics of graduate enrollment, by level of department: 1973**

| Item | Total | | Level of department | | | |
|---|---|---|---|---|---|---|
| | Number | Percent distribution | Master's | Percent distribution | Doctorate | Percent distribution |
| Total | 217,962 | 100.0 | 22,721 | 100.0 | 195,241 | 100.0 |
| Enrollment status: | | | | | | |
| Full time | 164,318 | 75.4 | 12,709 | 55.9 | 151,609 | 77.7 |
| Part time | 53,644 | 24.6 | 10,012 | 44.1 | 43,632 | 22.3 |
| Level of study: | | | | | | |
| First year | 276,224 | 35.0 | 11,990 | 52.8 | 64,234 | 32.9 |
| Beyond first year | 141,738 | 65.0 | 10,731 | 47.2 | 131,007 | 67.1 |
| Control of institution: | | | | | | |
| Public | 151,830 | 69.7 | 17,228 | 75.8 | 134,602 | 68.9 |
| Private | 66,132 | 30.3 | 5,493 | 24.2 | 60,639 | 31.1 |



## IT

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**rollment, by level of department: 1973**

| | Level of department | | | |
|---|---|---|---|---|
| rcent bution | Master's | Percent distribution | Doctorate | Percent distribution |
| 00.0 | 22,721 | 100.0 | 195,241 | 100.0 |
| 75.4 | 12,709 | 55.9 | 151,609 | 77.7 |
| 24.6 | 10,012 | 44.1 | 43,632 | 22.3 |
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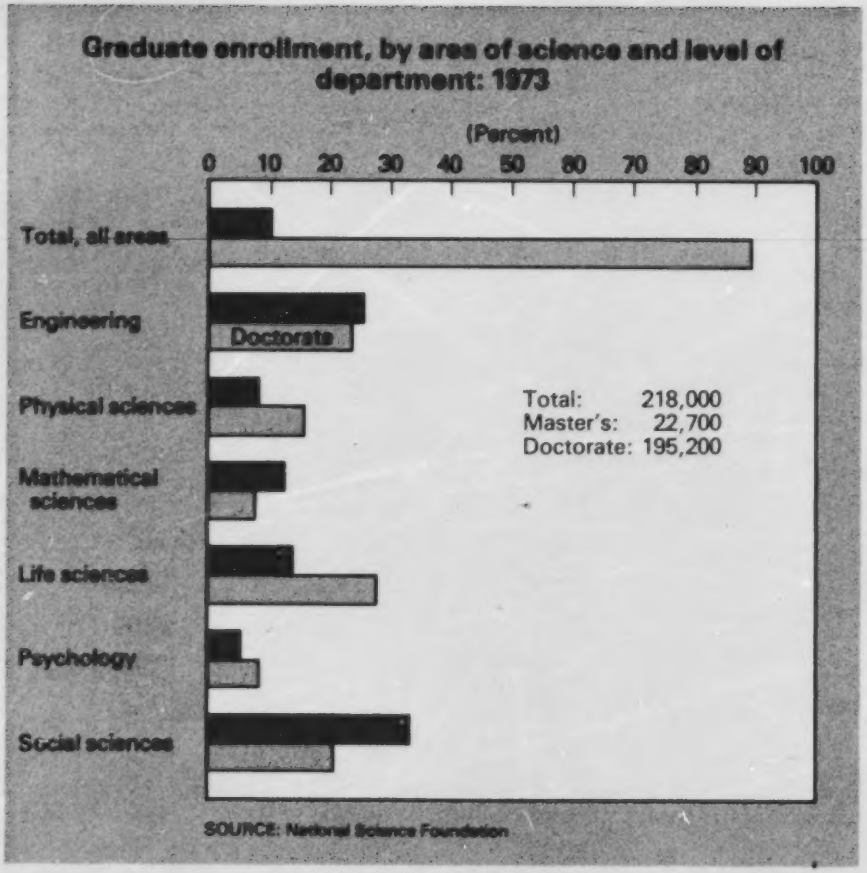
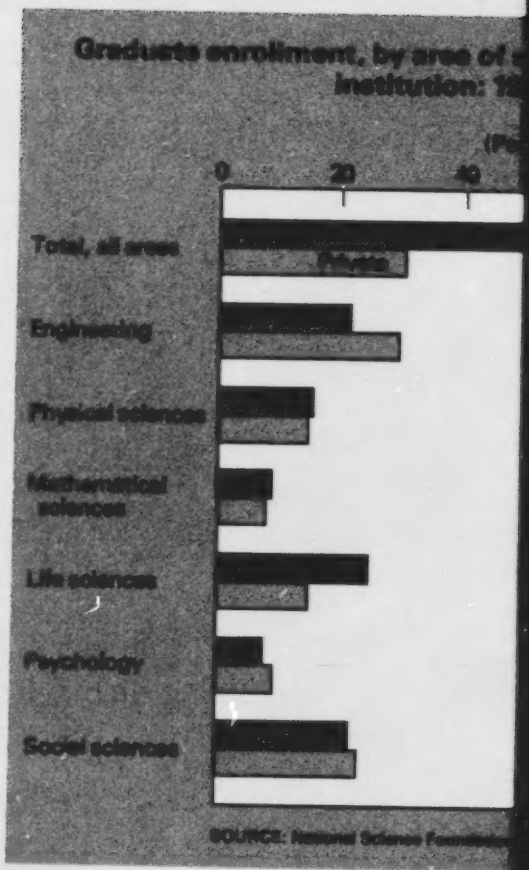


Public institutions tended to attract a higher proportion of full-time students than did private institutions. The relative number of first-year students was about the same in both public and private institutions, and a slightly higher percentage of students was enrolled in private doctorate departments than in public ones. Institutions under public control attracted a higher percentage of students in the physical, mathematical, and life sciences; privately controlled institutions enrolled a higher proportion of engineering, psychology, and social science majors.

**Characteristics of graduate enrollment, by control of institution: 1973**

| Item | Total | | Control of institution | | | |
|---|---|---|---|---|---|---|
| | Number | Percent distribution | Public | Percent distribution | Private | Percent distribution |
| Total | 217,962 | 100.0 | 151,830 | 100.0 | 66,132 | 100.0 |
| Enrollment status: | | | | | | |
| Full time | 164,318 | 75.4 | 120,072 | 79.1 | 44,246 | 66.9 |
| Part time | 53,644 | 24.6 | 31,758 | 20.9 | 21,886 | 33.1 |
| Level of study: | | | | | | |
| First year | 76,224 | 35.0 | 53,263 | 35.1 | 22,961 | 34.7 |
| Beyond first year | 141,738 | 65.0 | 98,567 | 64.9 | 43,171 | 65.3 |
| Level of department: | | | | | | |
| Master's | 22,721 | 10.4 | 17,228 | 11.3 | 5,493 | 8.3 |
| Doctorate | 195,241 | 89.6 | 134,602 | 88.7 | 60,639 | 91.7 |



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**rollment, by control of institution: 1973**

| | Control of institution | | | |
|---|---|---|---|---|
| rcent ibution | Public | Percent distribution | Private | Percent distribution |
| 00.0 | 151,830 | 100.0 | 66,132 | 100.0 |
| 75.4 | 120,072 | 79.1 | 44,246 | 66.9 |
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| 65.0 | 98,567 | 64.9 | 43,171 | 65.3 |
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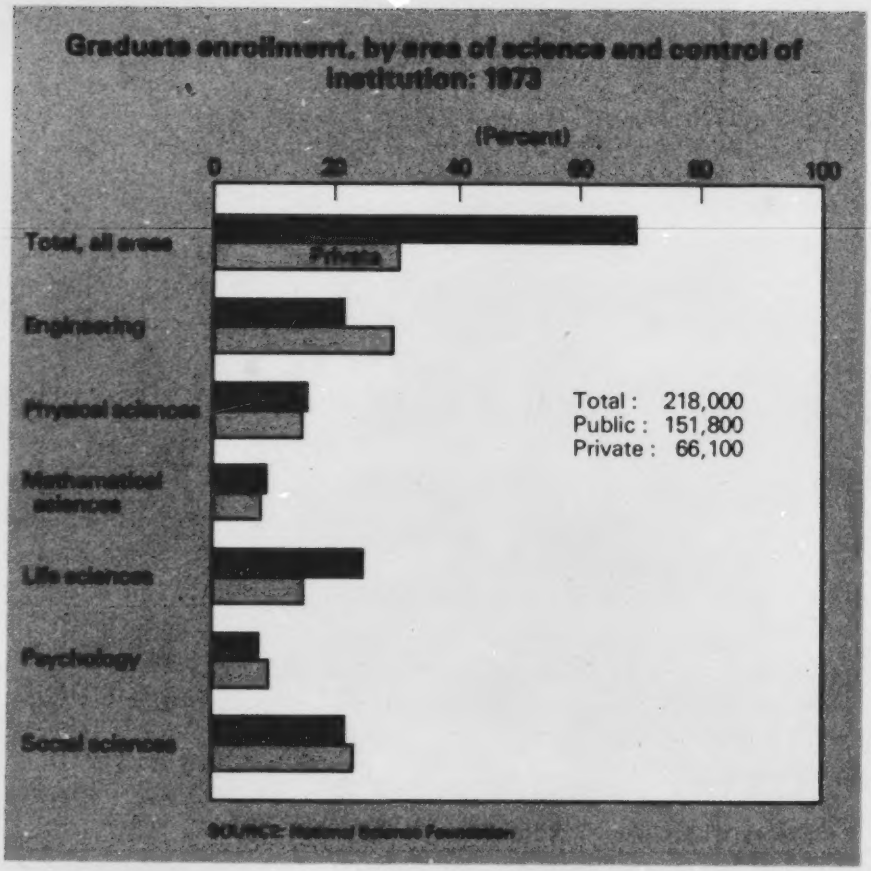
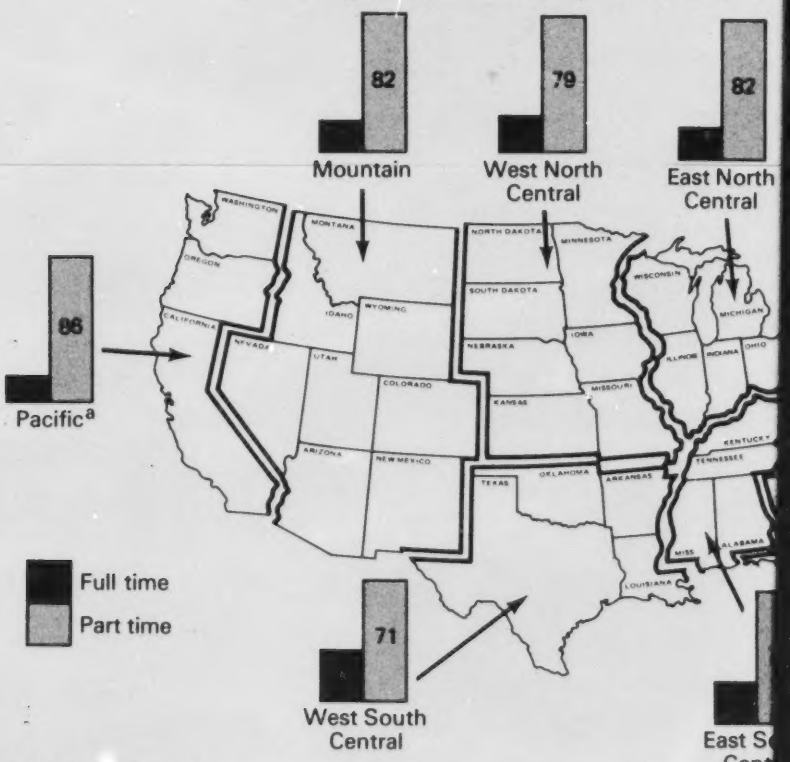


## GEOGRAPHIC DISTRIBUTION

The largest number of graduate science students were enrolled in institutions located in the Middle Atlantic division, and accounted for almost 43,800, or 20 percent of the total. Ranked next in size was the East North Central division, with 42,000 students; the Pacific division ranked third with 30,800. The lowest number of graduate students were in the outlying areas, where less than 600 were located.

The highest percentage of full-time graduate students were enrolled in institutions in the Pacific division; the lowest, in the Middle Atlantic.

**Geographic distribution of graduate students i engineering (In percents) by enrollment st**




[a]Includes Hawaii and Alaska.

SOURCE: National Science Foundation

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almost 43,800,
ext in size was
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than 600 were

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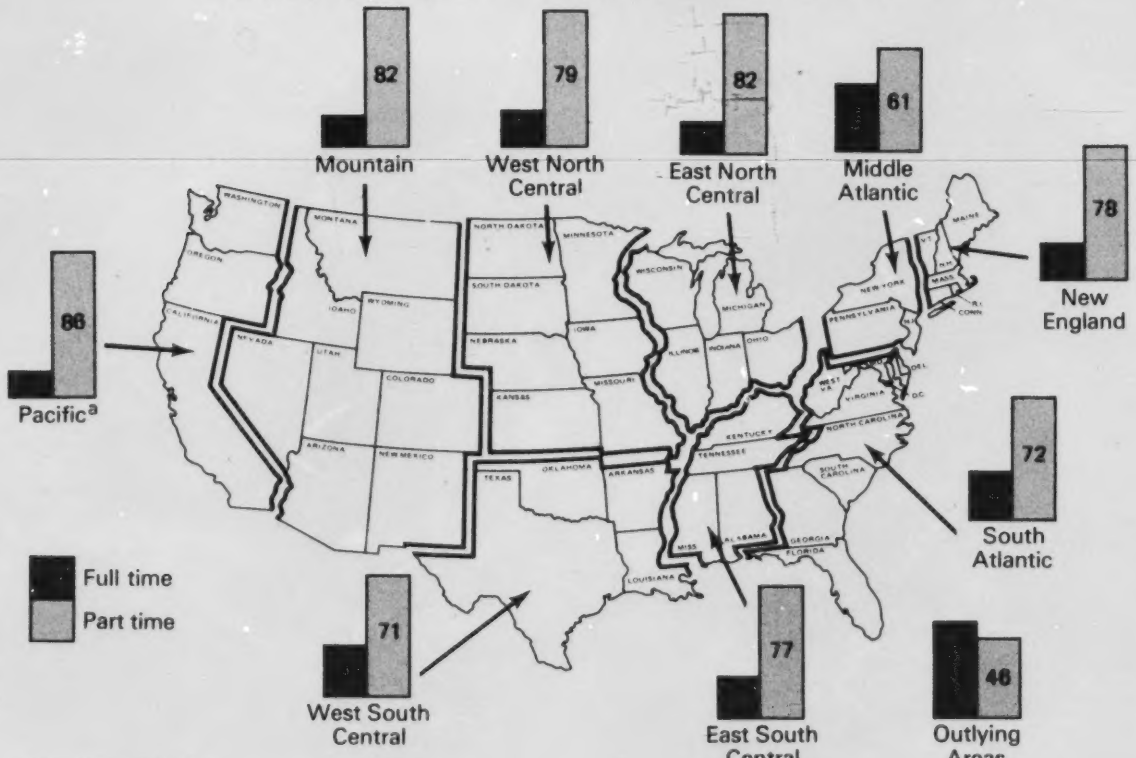
Atlantic.

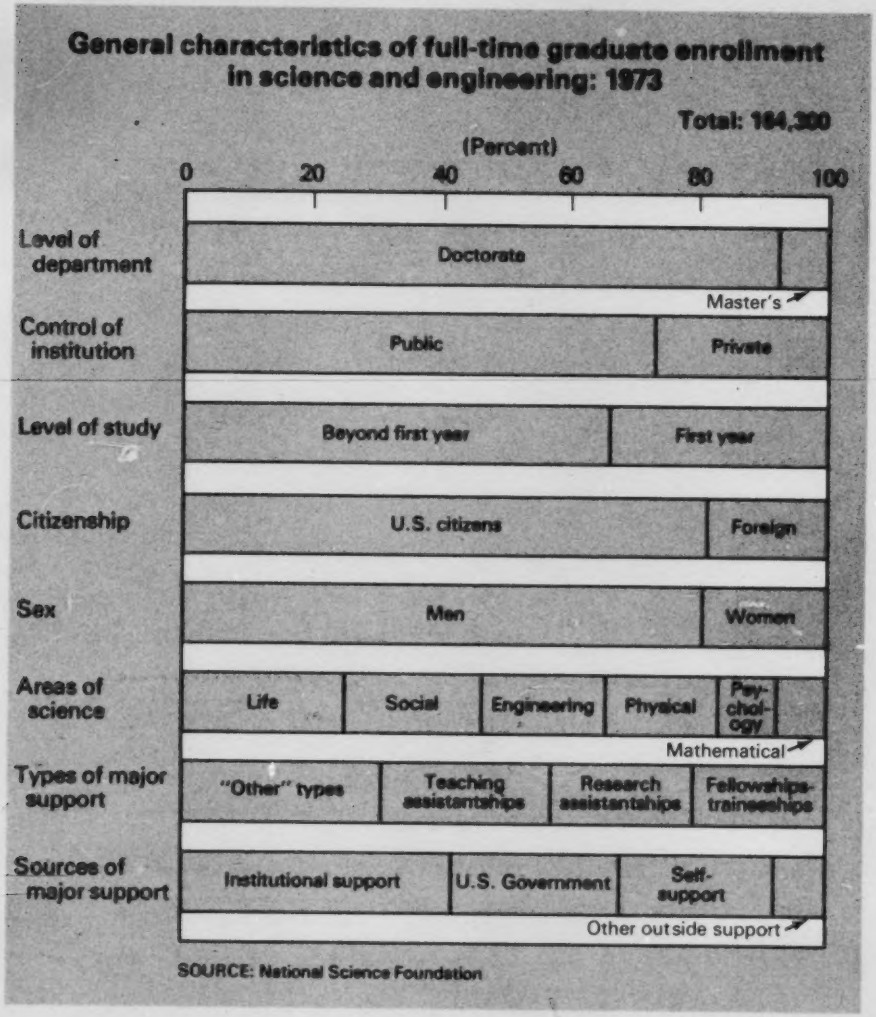
**Geographic distribution of graduate students in science and engineering (In percents) by enrollment status: 1973**




[a]Includes Hawaii and Alaska.
SOURCE: National Science Foundation

# FULL-TIME GRADUATE STUDENTS

The characteristics of full-time graduate students remained virtually the same in 1973 as in 1972. The typical student was a male U.S. citizen studying beyond his first year in a public institution at a doctorate level; he was primarily enrolled in a field of study in the life sciences, and received the bulk of his support from his own institution.




## Source of Major Support

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and engineering enrollment shifted from t
institutions themselves and to State and local go
and U.S. citizens relied heavily on such i
importance for both groups was Federal su
support. The general pattern was maintained in
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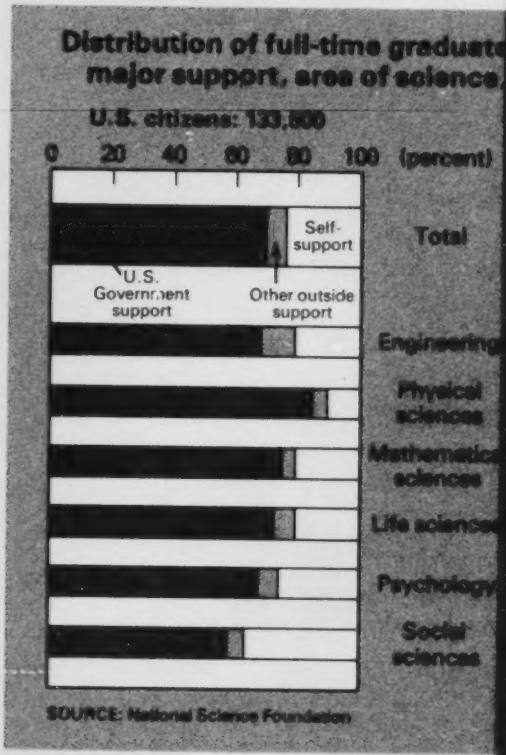

## E STUDENTS

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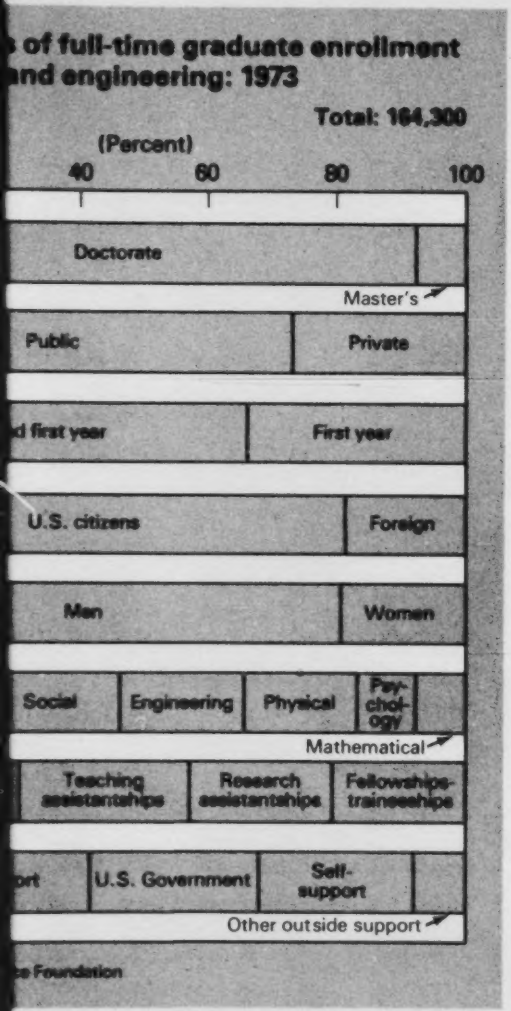
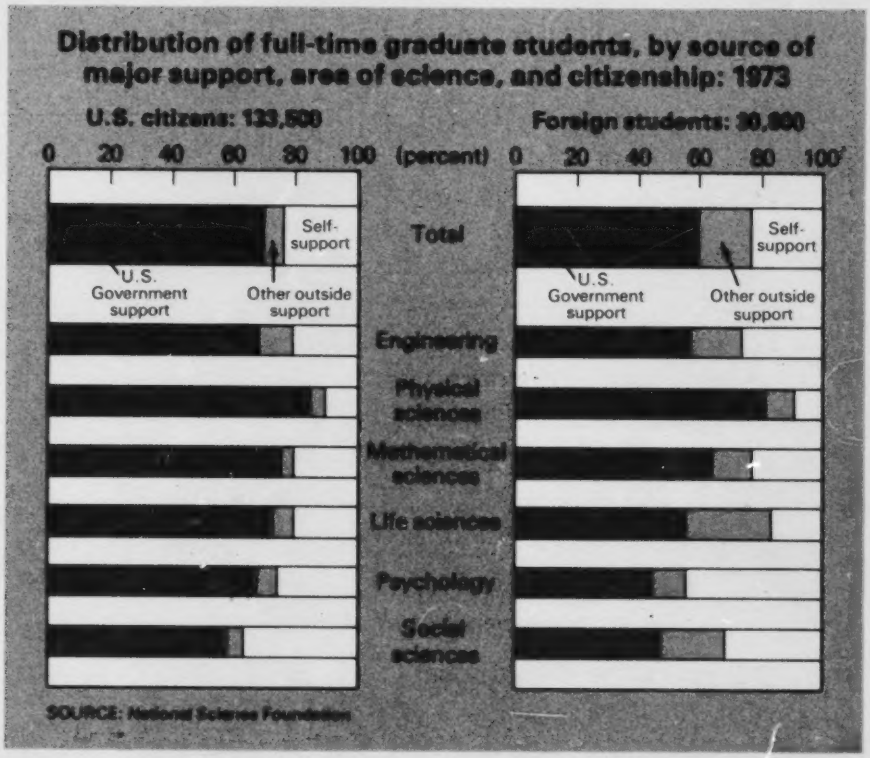


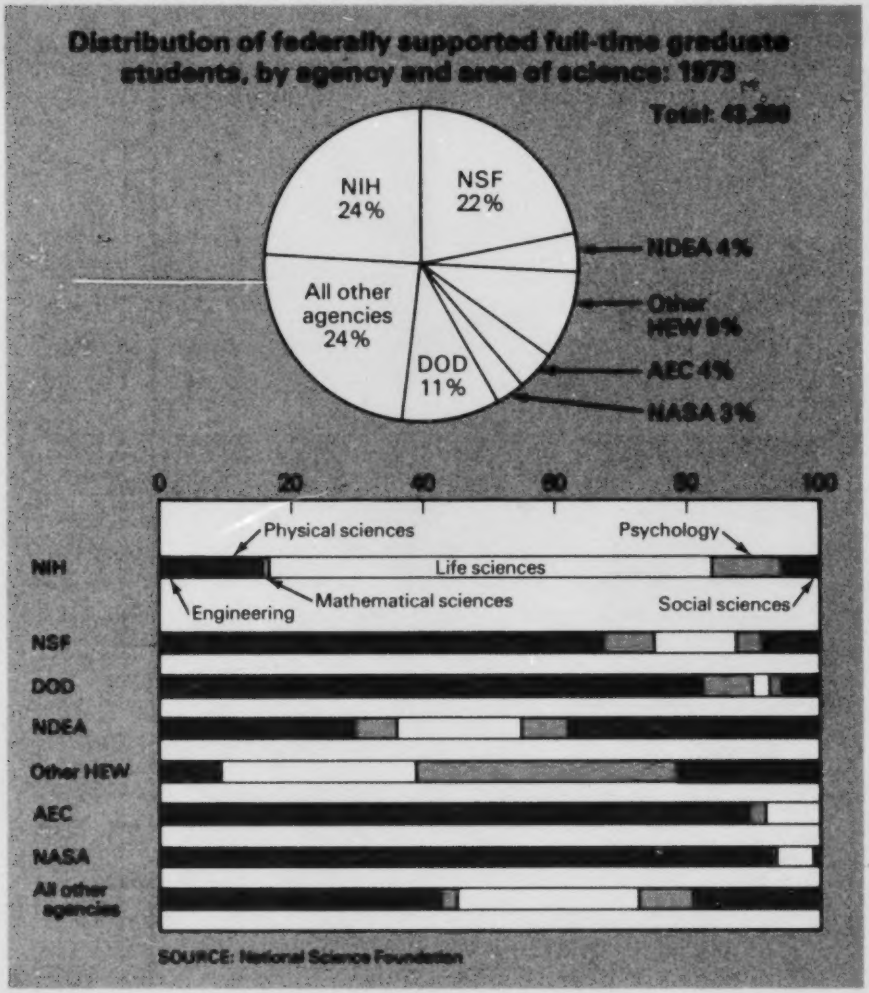

## Source of Major Support

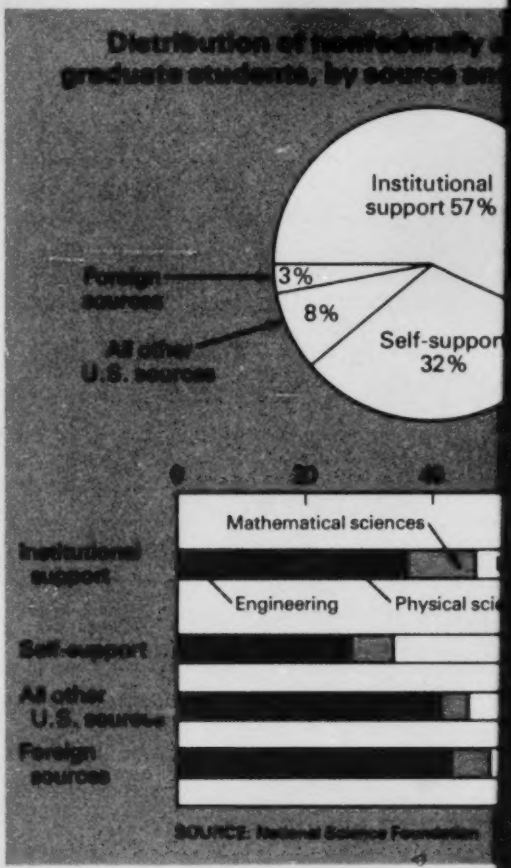
In 1973, as in other recent years, the dominant role in the support of science and engineering enrollment shifted from the Federal Government to the institutions themselves and to State and local governments. Both foreign students and U.S. citizens relied heavily on such institutional support. Second in importance for both groups was Federal support, closely followed by self-support. The general pattern was maintained in the physical and life sciences, but there were shifts in the utilization of support in all other areas.



Two Federal agencies played major roles in the support of graduate science education by supporting nearly one-half of all the full-time students receiving some form of Federal assistance: NIH, with 24 percent, and the National Science Foundation (NSF), with over 22 percent. These proportions were down slightly from those reported in 1972: 29 percent by NIH and 23 percent by NSF. NIH support continued to be concentrated in the life sciences and NSF, Atomic Energy Commission (AEC), and the National Aeronautics and Space Administration (NASA) in the physical sciences. The Department of Defense (DOD) primarily supported graduate students in engineering.

The proportion of students receiving su
sources shifted only slightly in 1973 from the prio
up to 57 percent (from 55 percent) of the
subsequent drop to 32 percent (from 34 perc
Institutional support was fairly evenly distribut
except psychology. Self-supported students
sciences.



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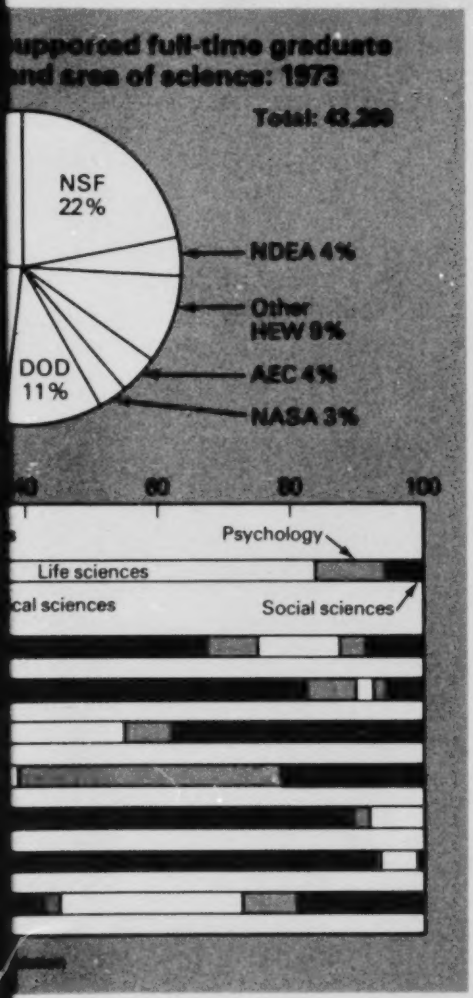
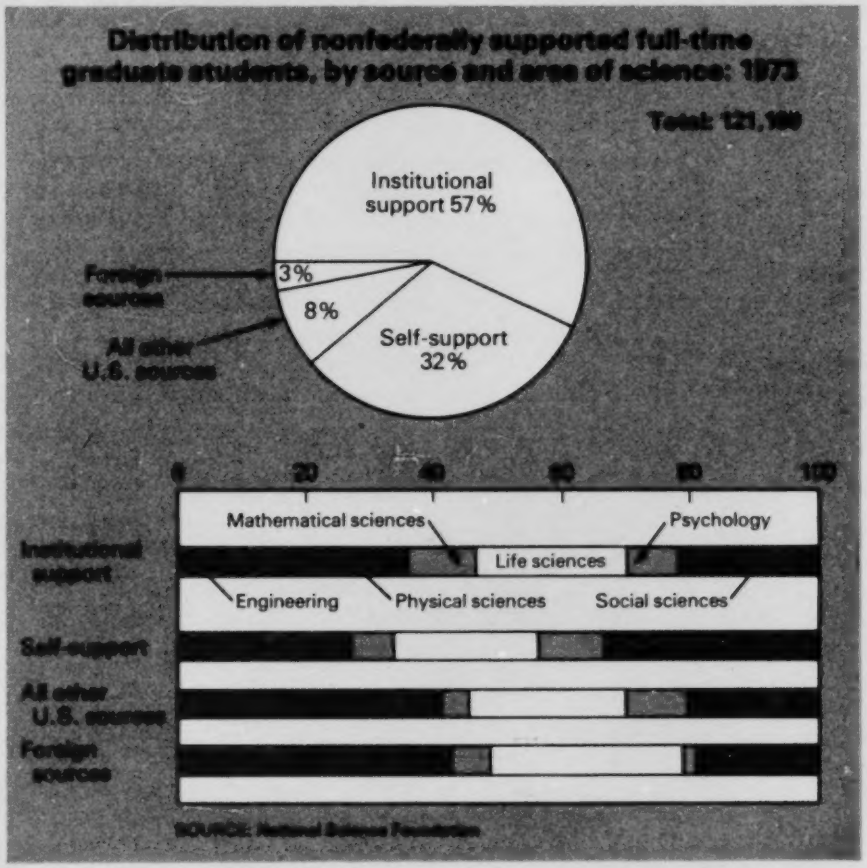





The proportion of students receiving support from other-than-Federal sources shifted only slightly in 1973 from the prior year. Institutional support went up to 57 percent (from 55 percent) of the non-Federal component with a subsequent drop to 32 percent (from 34 percent) in self-supported students. Institutional support was fairly evenly distributed among all the areas of science except psychology. Self-supported students were concentrated in the social sciences.



## Type of Major Support

In 1973 the principal type of support utilized by graduate students was the category "other" mechanisms, composed primarily of support provided by the students themselves; 31 percent relied on their own resources with the help of loans and family assistance. Teaching assistantships were the major category of support of another 26 percent, while research assistantships and fellowships-traineeships supported 22 percent and 21 percent each, respectively. The ranking in importance of the above mechanisms of support held true in public institutions; however, there was a shift in such dependence within private institutions, where over 33 percent of the students received a fellowship or traineeship, "other" mechanisms ranked second, and research and teaching assistantships were the least used mechanisms.

**Percent distribution of full-time graduate students, by type of major support and control of institution: 1973**

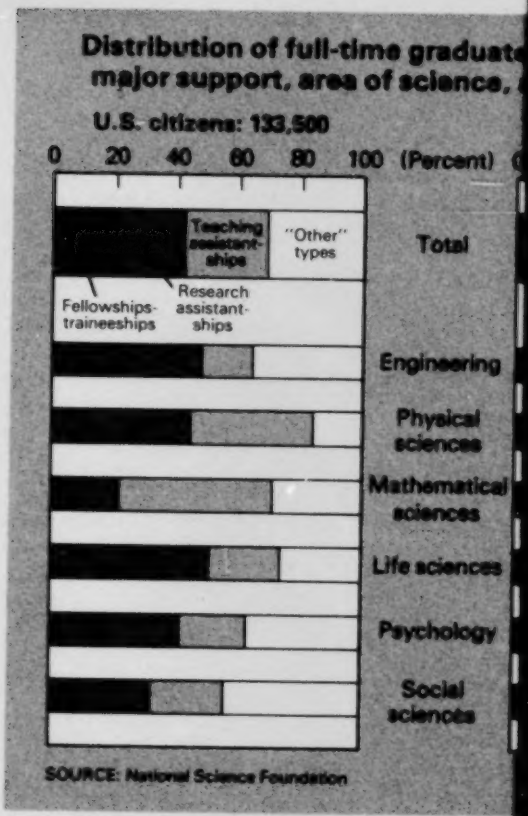
| Type of major support | Control of institution | |
|---|---|---|
| | Public | Private |
| Total | 100.0 | 100.0 |
| Fellowships-traineeships | 16.2 | 33.1 |
| Research assistantships | 23.0 | 19.2 |
| Teaching assistantships | 29.3 | 18.7 |
| Other types of support | 31.5 | 29.1 |



## Citizenship

Both U.S. and foreign students relied heav
support of their graduate education. Of each gr
"other" mechanisms for support. For U.S
assistantships ranked next in importance, whil
second for students from foreign countries. S
classroom communication are important factor
are selected as teaching assistants.

For U.S. citizens relying upon "other" m
enrolled the highest proportion of students. Fo
this resource, the greatest proportion was in psy
U.S. citizenship were concentrated in the n
foreign teaching assistants were most heavily in



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a shift in such dependence within private
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echanisms.

**tribution of full-time
lents, by type of major
ntrol of institution: 1973**

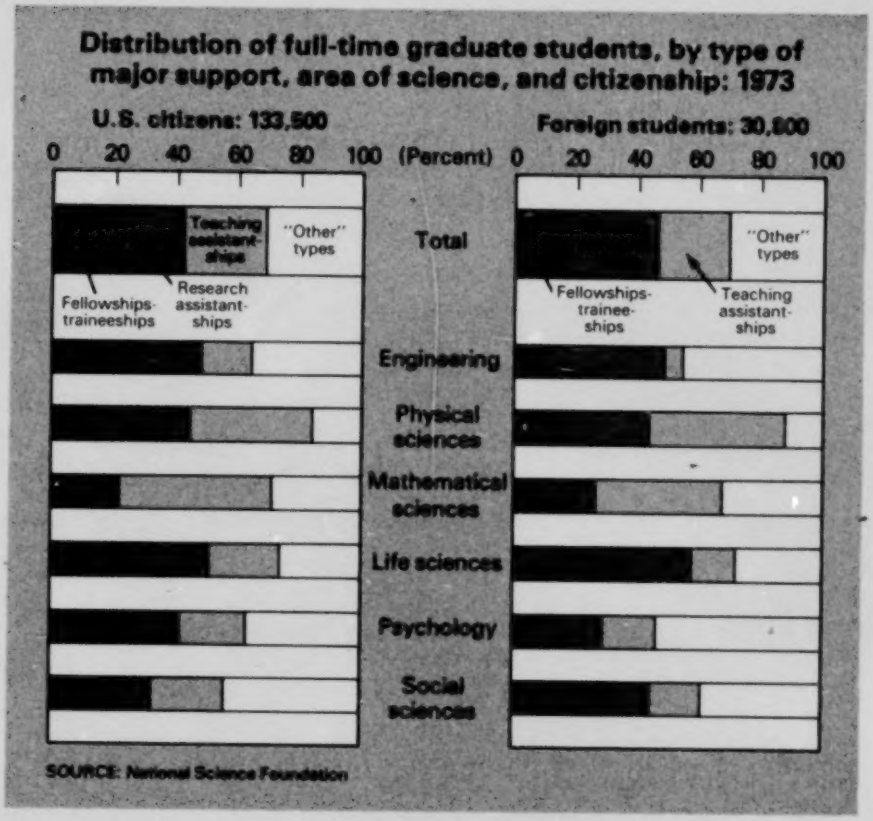
| | Control of institution | |
|---|---|---|
| port | Public | Private |
| ..... | 100.0 | 100.0 |
| ..... | 16.2 | 33.1 |
| ..... | 23.0 | 19.2 |
| ..... | 29.3 | 18.7 |
| ..... | 31.5 | 29.1 |

## Citizenship

Both U.S. and foreign students relied heavily upon thei. own resources for support of their graduate education. Of each group, 31 percent depended upon "other" mechanisms for support. For U.S. citizens, however, teaching assistantships ranked next in importance, while research assistantships ranked second for students from foreign countries. Since language ability and good classroom communication are important factors, relatively few foreign students are selected as teaching assistants.

For U.S. citizens relying upon "other" mechanisms, the social sciences enrolled the highest proportion of students. For foreign students dependent on this resource, the greatest proportion was in psychology. Teaching assistants with U.S. citizenship were concentrated in the mathematical sciences, whereas foreign teaching assistants were most heavily involved in the physical sciences.

**Distribution of full-time graduate students, by type of major support, area of science, and citizenship: 1973**




SOURCE: National Science Foundation

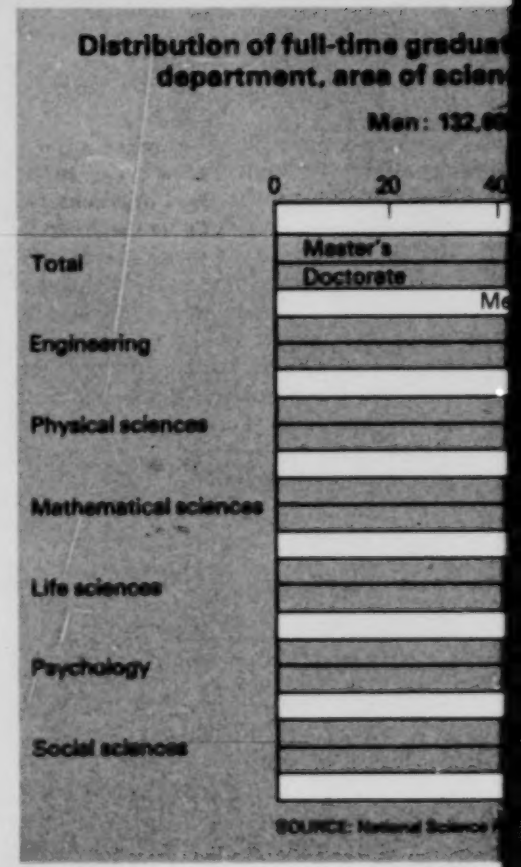
## Sex of Graduate Students

Occupational outlooks differ markedly and are more favorable for women graduate students today than for their predecessors. A recent report based on a longitudinal survey of doctorate recipients analyzed changes in occupational outlooks as they influence attitudes and aspirations of female graduate students. The study found that employment opportunities are becoming more favorable for women Ph.D.'s.[8] Consequently, recent trends show increasing rates of enrollment of women graduate science students, with more women being enrolled for graduate degrees in 1973 than ever before. Women graduate students represented 19 percent of the total number of full-time students in science and engineering in 1973, up slightly from their 18 percent share in 1972. A higher proportion of women were enrolled in master's departments than in doctorate departments, in every area of science. The largest proportion of women were enrolled in psychology, followed next by the social sciences; the smallest proportion was in engineering. As expected, the highest level of concentration of first-year male graduate students occurred in engineering; first-year female graduate students were concentrated in the life sciences.

[8] See John A. Centra, *Women, Men, and the Doctorate.* (Princeton: Educational Testing Service, 1974.)

**Percent distribution of full-time graduate students, by sex, level of study, and area of science: 1973**

| Sex of student and level of study | Number | Percent distribution | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Total | Engineering | Physical sciences | Mathematical sciences | Life sciences | Psychology | Social sciences |
| Total | 164,318 | 100.0 | 19.3 | 17.3 | 7.8 | 25.0 | 9.0 | 21.6 |
| Men: | 132,596 | 100.0 | 96.9 | 88.9 | 81.2 | 75.0 | 63.5 | 73.2 |
| First year | 44,312 | 100.0 | 29.5 | 15.2 | 7.7 | 22.3 | 5.6 | 19.7 |
| Beyond first year | 88,284 | 100.0 | 20.0 | 21.0 | 7.9 | 23.7 | 7.8 | 19.5 |
| Women: | 31,722 | 100.0 | 3.1 | 11.1 | 18.8 | 25.0 | 36.5 | 26.8 |
| First year | 11,534 | 100.0 | 4.2 | 8.7 | 8.5 | 33.1 | 14.9 | 30.4 |
| Beyond first year | 20,188 | 100.0 | 2.4 | 10.7 | 7.0 | 31.8 | 18.3 | 29.7 |



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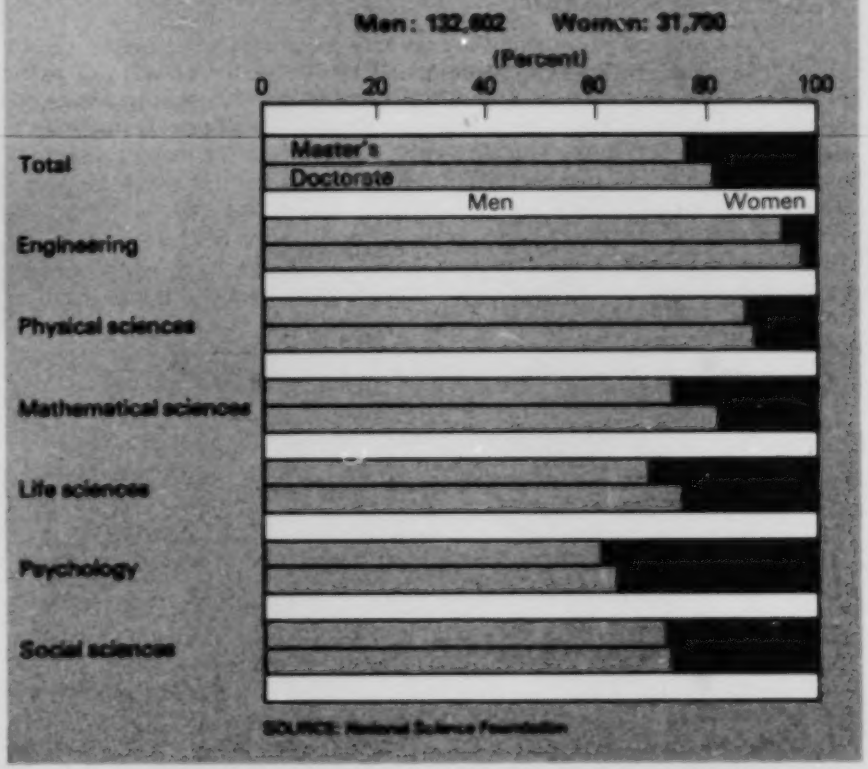
a of science. The largest proportion of
followed next by the social sciences; the
ring. As expected, the highest level of
te students occurred in engineering; first-
oncentrated in the life sciences.

Doctorate. (Princeton: Educational Testing Service,

**ull-time graduate students,
and area of science: 1973**

| | Percent distribution | | | | |
|---|---|---|---|---|---|
| | Physical sciences | Mathematical sciences | Life sciences | Psychology | Social sciences |
| | 17.3 | 7.8 | 25.0 | 9.0 | 21.6 |
| | 88.9 | 81.2 | 75.0 | 63.5 | 73.2 |
| | 15.2 | 7.7 | 22.3 | 5.6 | 19.7 |
| | 21.0 | 7.9 | 23.7 | 7.8 | 19.5 |
| | 11.1 | 18.8 | 25.0 | 36.5 | 26.8 |
| | 8.7 | 8.5 | 33.1 | 14.9 | 30.4 |
| | 10.7 | 7.0 | 31.8 | 18.3 | 29.7 |

**Distribution of full-time graduate students, by level of department, area of science, and sex: 1973**



A higher proportion of women than men received support from their own institutions and were self-supporting; Federal support went to a higher proportion of men than to women. Of all Federal agencies, NIH supported the largest share of women graduate students, 27 percent; and DOD the lowest, 3 percent.

**Percent distribution of full-time graduate students, by source of major support and sex: 1973**

| Source of major support | Men | Women |
|---|---|---|
| Total | 100.0 | 100.0 |
| U.S. Government | 27.2 | 22.6 |
| Institutional support | 41.3 | 43.1 |
| Other outside support | 8.9 | 6.3 |
| Self-support | 22.6 | 28.0 |

**Percent distribution of supported full-time gradu by sex: 1973**

| Federal Agency | Number | T |
|---|---|---|
| U.S. Government, total | 43,196 | 1 |
| Atomic Energy Commission | 1,562 | 1 |
| Department of Defense | 4,722 | 1 |
| Health, Education, and Welfare, total | 15,825 | 1 |
| National Institutes of Health | 10,197 | 1 |
| Other HEW | 5,628 | 1 |
| National Aeronautics and Space Administration | 1,244 | 1 |
| National Science Foundation | 9,682 | 1 |
| All other agencies | 10,161 | 1 |

than men received support from their own
ting; Federal support went to a higher
Of all Federal agencies, NIH supported the
udents, 27 percent; and DOD the lowest, 3

**ribution of full-time
dents, by source of
port and sex: 1973**

| port | Men | Women |
|---|---|---|
| ..... | 100.0 | 100.0 |
| ..... | 27.2 | 22.6 |
| ..... | 41.3 | 43.1 |
| ..... | 8.9 | 6.3 |
| ..... | 22.6 | 28.0 |

**Percent distribution of federally supported full-time graduate students, by sex: 1973**

| Federal Agency | Number | Percent distribution | | |
|---|---|---|---|---|
| | | Total | Men | Women |
| U.S. Government, total ..... | 43,196 | 100.0 | 83.4 | 16.6 |
| Atomic Energy Commission ..... | 1,562 | 100.0 | 93.4 | 6.6 |
| Department of Defense | 4,722 | 100.0 | 97.0 | 3.0 |
| Health, Education, and Welfare, total ... | 15,825 | 100.0 | 71.2 | 28.8 |
| National Institutes of Health ..... | 10,197 | 100.0 | 73.4 | 26.6 |
| Other HEW ..... | 5,628 | 100.0 | 67.3 | 32.7 |
| National Aeronautics and Space Administration ..... | 1,244 | 100.0 | 96.1 | 3.9 |
| National Science Foundation ..... | 9,682 | 100.0 | 88.3 | 11.7 |
| All other agencies ..... | 10,161 | 100.0 | 88.2 | 11.8 |

## GEOGRAPHIC DISTRIBUTION.

Over one-third of the full-time enrollees in universities in the Pacific division received Federal support, the highest proportion in any division. The lowest percentage were enrolled in institutions in the West South Central division, where less than one-fifth were federally supported.

**Distribution of full-time graduate students, by State and source of major support: 1973**

| Division and State | Total | | Federal support | | Non-Federal support | |
|---|---|---|---|---|---|---|
| | Number | Percent distribution | Number | Percent of total | Number | Percent of total |
| United States, total | 164,318 | 100.0 | 43,196 | 26.3 | 121,122 | 73.7 |
| New England | 14,403 | 8.8 | 4,252 | 29.5 | 10,151 | 70.5 |
| Maine | 326 | 0.2 | 77 | 23.6 | 249 | 76.4 |
| New Hampshire | 575 | 0.3 | 145 | 25.2 | 430 | 74.8 |
| Vermont | 508 | 0.3 | 93 | 18.3 | 415 | 81.7 |
| Massachusetts | 9,017 | 5.5 | 2,905 | 32.2 | 6,112 | 67.8 |
| Rhode Island | 1,237 | 0.7 | 416 | 33.6 | 821 | 66.4 |
| Connecticut | 2,740 | 1.7 | 616 | 22.5 | 2,124 | 77.5 |
| Middle Atlantic | 26,690 | 16.2 | 6,278 | 23.5 | 20,412 | 76.5 |
| New York | 16,391 | 10.0 | 3,644 | 22.2 | 12,747 | 77.8 |
| New Jersey | 3,119 | 1.9 | 704 | 22.6 | 2,415 | 77.4 |
| Pennsylvania | 7,180 | 4.4 | 1,930 | 26.9 | 5,250 | 73.1 |
| East North Central | 34,448 | 21.0 | 8,591 | 24.9 | 25,857 | 75.1 |
| Ohio | 7,510 | 4.6 | 1,834 | 24.4 | 5,676 | 75.6 |
| Indiana | 5,088 | 3.1 | 1,225 | 24.1 | 3,863 | 75.9 |
| Illinois | 9,220 | 5.6 | 2,553 | 27.7 | 6,667 | 72.3 |
| Michigan | 7,985 | 4.9 | 1,457 | 18.2 | 6,528 | 81.8 |
| Wisconsin | 4,645 | 2.8 | 1,522 | 32.8 | 3.123 | 67.2 |
| West North Central | 13,243 | 8.1 | 3,630 | 27.4 | 9,613 | 72.6 |
| Minnesota | 3,403 | 2.1 | 1,103 | 32.4 | 2,300 | 67.6 |
| Iowa | 2,843 | 1.7 | 676 | 23.8 | 2,167 | 76.2 |
| Missouri | 2,975 | 1.8 | 793 | 26.7 | 2,182 | 73.3 |
| North Dakota | 368 | 0.2 | 100 | 27.2 | 268 | 72.8 |
| South Dakota | 496 | 0.3 | 212 | 42.7 | 284 | 57.3 |
| Nebraska | 799 | 0.5 | 144 | 18.0 | 655 | 82.0 |
| Kansas | 2,359 | 1.4 | 602 | 25.5 | 1,757 | 74.5 |
| South Atlantic | 19,235 | 11.7 | 5,106 | 26.5 | 14,129 | 73.5 |
| Delaware | 449 | 0.3 | 104 | 23.2 | 345 | 76.8 |
| Maryland | 2,792 | 1.7 | 821 | 29.4 | 1,971 | 70.6 |
| District of Columbia | 1,756 | 1.1 | 352 | 20.0 | 1,404 | 80.0 |
| Virginia | 2,277 | 1.4 | 538 | 23.6 | 1,739 | 76.4 |

| Division and State | Total | | Fe |
|---|---|---|---|
| | Number | Percent distribution | Numb |
| West Virginia | 770 | 0.5 | |
| North Carolina | 3,516 | 2.1 | 1, |
| South Carolina | 1,188 | 0.7 | |
| Georgia | 2,622 | 1.6 | |
| Florida | 3,865 | 2.4 | 1, |
| East South Central | 5,694 | 3.5 | 1, |
| Kentucky | 1,141 | 0.7 | |
| Tennessee | 2,440 | 1.5 | |
| Alabama | 1,094 | 0.7 | |
| Mississippi | 1,019 | 0.6 | |
| West South Central | 12,703 | 7.7 | 2, |
| Arkansas | 606 | 0.4 | |
| Louisiana | 1,909 | 1.2 | |
| Oklahoma | 2,174 | 1.3 | |
| Texas | 8,014 | 4.9 | 1, |
| Mountain | 11,333 | 6.9 | 2, |
| Montana | 587 | 0.4 | |
| Idaho | 584 | 0.4 | |
| Wyoming | 495 | 0.3 | |
| Colorado | 3,646 | 2.2 | 1, |
| New Mexico | 1,044 | 0.6 | |
| Arizona | 2,732 | 1.7 | |
| Utah | 1,926 | 1.2 | |
| Nevada | 319 | 0.2 | |
| Pacific | 26,307 | 16.0 | 8 |
| Washington | 2,944 | 1.8 | |
| Oregon | 2,328 | 1.4 | |
| California | 19,460 | 11.8 | 6 |
| Alaska | 213 | 0.1 | |
| Hawaii | 1,362 | 0.8 | |
| Outlying areas | 262 | 0.2 | |

GEOGRAPHIC DISTRIBUTION.

Over one-third of the full-time enrollees in universities in the Pacific division received Federal support, the highest proportion in any division. The lowest percentage were enrolled in institutions in the West South Central division, where less than one-fifth were federally supported.

**Distribution of full-time graduate students, by State and source of major support: 1973**

| | Federal support | | Non-Federal support | |
|---|---|---|---|---|
| rcent ibution | Number | Percent of total | Number | Percent of total |
| 00.0 | 43,196 | 26.3 | 121,122 | 73.7 |
| 8.8 | 4,252 | 29.5 | 10,151 | 70.5 |
| 0.2 | 77 | 23.6 | 249 | 76.4 |
| 0.3 | 145 | 25.2 | 430 | 74.8 |
| 0.3 | 93 | 18.3 | 415 | 81.7 |
| 5.5 | 2,905 | 32.2 | 6,112 | 67.8 |
| 0.7 | 416 | 33.6 | 821 | 66.4 |
| 1.7 | 616 | 22.5 | 2,124 | 77.5 |
| 16.2 | 6,278 | 23.5 | 20,412 | 76.5 |
| 10.0 | 3,644 | 22.2 | 12,747 | 77.8 |
| 1.9 | 704 | 22.6 | 2,415 | 77.4 |
| 4.4 | 1,930 | 26.9 | 5,250 | 73.1 |
| 21.0 | 8,591 | 24.9 | 25,857 | 75.1 |
| 4.6 | 1,834 | 24.4 | 5,676 | 75.6 |
| 3.1 | 1,225 | 24.1 | 3,863 | 75.9 |
| 5.6 | 2,553 | 27.7 | 6,667 | 72.3 |
| 4.9 | 1,457 | 18.2 | 6,528 | 81.8 |
| 2.8 | 1,522 | 32.8 | 3.123 | 67.2 |
| 8.1 | 3,630 | 27.4 | 9,613 | 72.6 |
| 2.1 | 1,103 | 32.4 | 2,300 | 67.6 |
| 1.7 | 676 | 23.8 | 2,167 | 76.2 |
| 1.8 | 793 | 26.7 | 2,182 | 73.3 |
| 0.2 | 100 | 27.2 | 268 | 72.8 |
| 0.3 | 212 | 42.7 | 284 | 57.3 |
| 0.5 | 144 | 18.0 | 655 | 82.0 |
| 1.4 | 602 | 25.5 | 1,757 | 74.5 |
| 11.7 | 5,106 | 26.5 | 14,129 | 73.5 |
| 0.3 | 104 | 23.2 | 345 | 76.8 |
| 1.7 | 821 | 29.4 | 1,971 | 70.6 |
| 1.1 | 352 | 20.0 | 1,404 | 80.0 |
| 1.4 | 538 | 23.6 | 1,739 | 76.4 |

| Division and State | Total | | Federal support | | Non-Federal support | |
|---|---|---|---|---|---|---|
| | Number | Percent distribution | Number | Percent of total | Number | Percent of total |
| West Virginia | 770 | 0.5 | 179 | 23.2 | 591 | 76.8 |
| North Carolina | 3,516 | 2.1 | 1,215 | 34.6 | 2,301 | 65.4 |
| South Carolina | 1,188 | 0.7 | 201 | 16.9 | 987 | 83.1 |
| Georgia | 2,622 | 1.6 | 535 | 20.4 | 2,087 | 79.6 |
| Florida | 3,865 | 2.4 | 1,161 | 30.0 | 2,704 | 70.0 |
| East South Central | 5,694 | 3.5 | 1,259 | 22.1 | 4,435 | 77.9 |
| Kentucky | 1,141 | 0.7 | 210 | 18.4 | 931 | 81.6 |
| Tennessee | 2,440 | 1.5 | 587 | 24.1 | 1,853 | 75.9 |
| Alabama | 1,094 | 0.7 | 224 | 20.5 | 870 | 79.5 |
| Mississippi | 1,019 | 0.6 | 238 | 23.4 | 781 | 76.6 |
| West South Central | 12,703 | 7.7 | 2,371 | 18.7 | 10,332 | 81.3 |
| Arkansas | 606 | 0.4 | 123 | 20.3 | 483 | 79.7 |
| Louisiana | 1,909 | 1.2 | 360 | 18.9 | 1,549 | 81.1 |
| Oklahoma | 2,174 | 1.3 | 401 | 18.4 | 1,773 | 81.6 |
| Texas | 8,014 | 4.9 | 1,487 | 18.6 | 6,527 | 81.4 |
| Mountain | 11,333 | 6.9 | 2,901 | 25.6 | 8,432 | 74.4 |
| Montana | 587 | 0.4 | 132 | 22.5 | 455 | 77.5 |
| Idaho | 584 | 0.4 | 110 | 18.8 | 474 | 81.2 |
| Wyoming | 495 | 0.3 | 122 | 24.6 | 373 | 75.4 |
| Colorado | 3,646 | 2.2 | 1,138 | 31.2 | 2,508 | 68.8 |
| New Mexico | 1,044 | 0.6 | 246 | 23.6 | 798 | 76.4 |
| Arizona | 2,732 | 1.7 | 521 | 19.1 | 2,211 | 80.9 |
| Utah | 1,926 | 1.2 | 583 | 30.3 | 1,343 | 69.7 |
| Nevada | 319 | 0.2 | 49 | 15.4 | 270 | 84.6 |
| Pacific | 26,307 | 16.0 | 8,767 | 33.3 | 17,540 | 66.7 |
| Washington | 2,944 | 1.8 | 946 | 32.1 | 1,998 | 67.9 |
| Oregon | 2,328 | 1.4 | 583 | 25.0 | 1,745 | 75.0 |
| California | 19,460 | 11.8 | 6,678 | 34.3 | 12,782 | 65.7 |
| Alaska | 213 | 0.1 | 66 | 31.0 | 147 | 69.0 |
| Hawaii | 1,362 | 0.8 | 494 | 36.3 | 868 | 63.7 |
| Outlying areas | 262 | 0.2 | 41 | 15.6 | 221 | 84.4 |

## Graduate Departments in Medical Schools

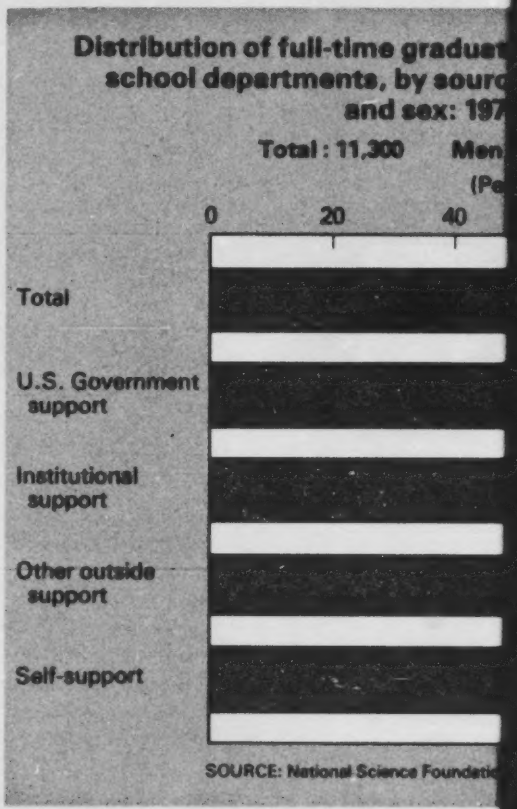
Full-time enrollment in graduate departments affiliated with medical schools accounted for only 7 percent of all full-time enrollment in 1973. Characteristics of the 11,300 students in this category were examined for comparative purposes with graduate students in all other science departments.

Over one-half of all Ph.D. candidates enrolled in medical schools were receiving a fellowship or traineeship. Less than one-fifth of enrollees in all other graduate departments received such support. The Federal Government was the prime source of support of these students, whereas all other graduate students received most of their support from the institutions themselves, along with State and local governments. A substantially higher percentage of women were enrolled in graduate programs in medical schools than in all other graduate programs, and a significantly lower percentage of foreign students were so enrolled.

**Percent distribution of full-time graduate students in medical school departments, as compared with all other graduate departments: 1973**

| Item | Medical school departments | All other graduate departments |
|---|---|---|
| Total number | 11,289 | 153,029 |
| | Percent distribution | |
| By type: | | |
| Fellowships-traineeships | 51.5 | 18.5 |
| Research assistantships | 12.4 | 22.7 |
| Teaching assistantships | 11.2 | 27.5 |
| Other types of support | 24.9 | 31.3 |
| By source: | | |
| U.S. Government support | 46.2 | 24.8 |
| Institutional support | 26.6 | 42.8 |
| Other outside support | 6.6 | 8.5 |
| Self-support | 20.5 | 23.9 |
| By sex: | | |
| Men | 71.4 | 81.4 |
| Women | 28.6 | 18.6 |
| By citizenship: | | |
| United States | 89.0 | 80.7 |
| Foreign | 11.0 | 19.3 |

Within each class of major outside financial
over one-fourth of the available funds, but w
women constituted one-third of the total.



## in Medical Schools

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e students, whereas all other graduate students
om the institutions themselves, along with State
stantially higher percentage of women were
in medical schools than in all other graduate
wer percentage of foreign students were so

**ibution of full-time graduate
nedical school departments,
ed with all other graduate
epartments: 1973**

| | Medical school departments | All other graduate departments |
|---|---|---|
| ..... | 11,289 | 153,029 |
| | Percent distribution | |
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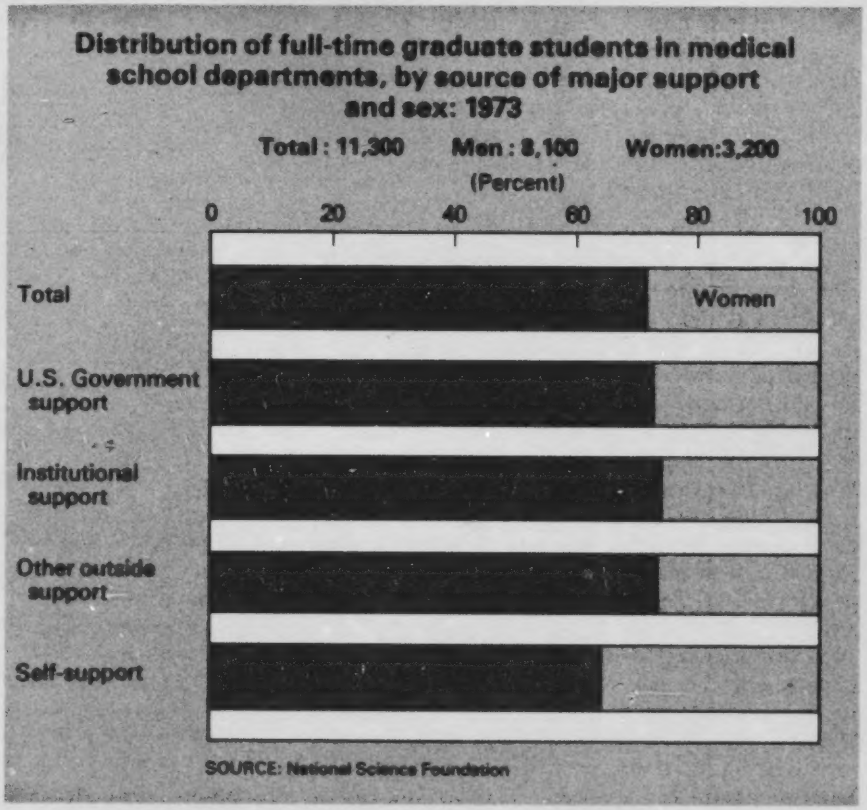
| ps ..... | 12.4 | 22.7 |
| ps ..... | 11.2 | 27.5 |
| ort ..... | 24.9 | 31.3 |
| pport ..... | 46.2 | 24.8 |
| ..... | 26.6 | 42.8 |
| rt ..... | 6.6 | 8.5 |
| ..... | 20.5 | 23.9 |
| ..... | 71.4 | 81.4 |
| ..... | 28.6 | 18.6 |
| ..... | 89.0 | 80.7 |
| ..... | 11.0 | 19.3 |

Within each class of major outside financial support, women received a little over one-fourth of the available funds, but within the self-supported group, women constituted one-third of the total.



# Section 3. Postdoctorals

## TRENDS IN POSTDOCTORAL UTILIZATION IN SCIENCE AND ENGINEERING

For this study, the term "postdoctoral" or "research associate" refers to those appointees who devote full time to research activities or study for a temporary, but specific, time period. An element of training exists in these appointments, and some postdoctorals are involved in the teaching of graduate students through seminars or lectures, although this aspect of their employment is not generally stressed.

The number of postdoctoral appointees in the matched set of departments in the period 1972 to 1973 amounted to only 64 percent of the 16,400 postdoctorals reported in 1973. This undercoverage occurred primarily in the life sciences, as clinical-medical departments were not fully represented in the 1972 survey; i.e., only 658 departments in medical schools granting science Ph.D.'s responded. In 1973 data were received from 2,452 departments in medical schools. Thus, as expansion of the survey coverage continues, trend information will be more representative of the entire postdoctoral population in future reports. Since nearly one-half of the postdoctorals were accounted for by the medical school respondents in 1973, the following trend analysis related primarily to nonmedical departments. Also, the number of postdoctorals utilized by master's departments in 1973 was less than 1 percent of the total, so they have been combined with those in doctorate departments for this analysis.

**Percent change in the number of postdoctorals in matched departments, by area of science and control of institution: 1972 to 1973**

| Area of science | Total | Public | Private |
|---|---|---|---|
| Total, all areas | -6.1 | -7.6 | -4.0 |
| Engineering | -3.2 | -3.5 | -2.9 |
| Physical sciences | -3.7 | -6.7 | .7 |
| Mathematical sciences | -34.6 | -56.9 | -8.9 |
| Life sciences[1] | -5.5 | -5.2 | -5.8 |
| Psychology | -39.7 | -33.1 | -45.2 |
| Social sciences | -3.9 | -14.1 | 14.4 |

[1] See explanation in text regarding undercoverage in medical departments.

NOTE: Based on 4,112 graduate departments reporting in 1972 and 1973.

For the first time in this data series, the number of postdoctorals in matched departments has shown a downturn that is reflected in every major area of science. Since many postdoctoral appointments are considered to be temporary, short-term employment for recent Ph.D. graduates, this reduction in numbers may reflect more favorable job opportunities outside of the academic sector. Both public and private institutions lost some of their postdoctoral "pool" in 1973, with public institutions losing these appointees at almost twice the rate as private ones.

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**Percent change in the number of postdoctorals in matched departments, by area of science and control of institution: 1972 to 1973**

| Area of science | Total | Public | Private |
|---|---|---|---|
| Total, all areas | -6.1 | -7.6 | -4.0 |
| Engineering | -3.2 | -3.5 | -2.9 |
| Physical sciences | -3.7 | -6.7 | .7 |
| Mathematical sciences | -34.6 | -56.9 | -8.9 |
| Life sciences[1] | -5.5 | -5.2 | -5.8 |
| Psychology | -39.7 | -33.1 | -45.2 |
| Social sciences | -3.9 | -14.1 | 14.4 |

[1] See explanation in text regarding undercoverage in medical departments.

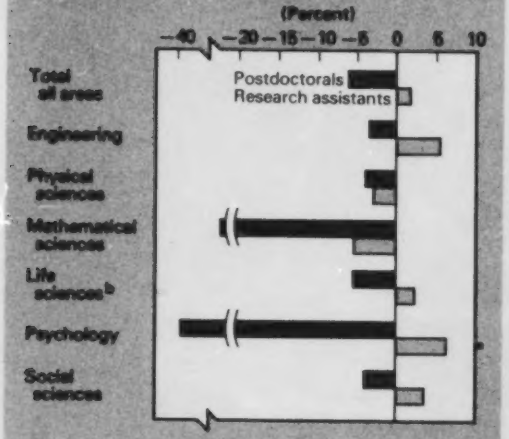
NOTE: Based on 4,112 graduate departments reporting in 1972 and 1973.

For the first time in this data series, the number of postdoctorals in matched departments has shown a downturn that is reflected in every major area of science. Since many postdoctoral appointments are considered to be temporary, short-term employment for recent Ph.D. graduates, this reduction in numbers may reflect more favorable job opportunities outside of the academic sector. Both public and private institutions lost some of their postdoctoral "pool" in 1973, with public institutions losing these appointees at almost twice the rate as private ones.

## Comparison with Research Assistantship Utilization

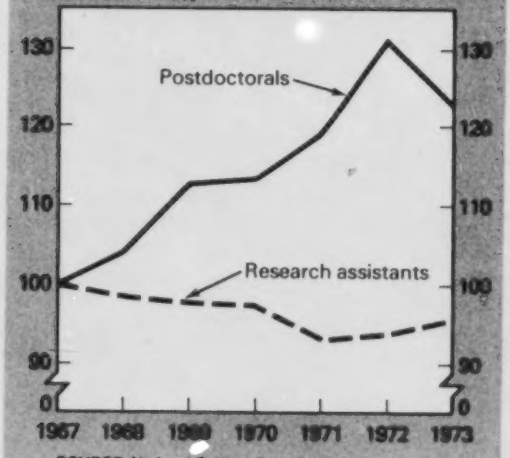
While the number of postdoctorals employed in institutions of higher education dropped by 6 percent from 1972 to 1973, the total number of graduate students holding research assistantships increased by 2 percent, heavily influenced by the increase in support from the institutions themselves. This shift in the utilization of manpower resources for the performance of research reflects a reversal of the long-term trend noted in previous studies. In the period 1967 through 1972, when Federal R&D obligations rose 15 percent in constant-dollar terms, the number of research assistants supported on Federal projects dropped 11 percent. By 1972 the total number of postdoctorals, of whom over two-thirds were employed on Federal projects in 1973, rose 31 percent above the 1967 level. In the most recent 1972-73 period, however, Federal R&D obligations to universities and colleges were reduced by $41 million in constant-dollar terms, or by 3 percent, and postdoctorals subsequently were lower by 6 percent.

**Change in numbers of postdoctorals and research assistants: 1972 to 1973[a]**




[a]Based on 4,112 graduate departments reporting in 1972 and 1973.
[b]Data for clinical-medical fields are underreported.
SOURCE: National Science Foundation

**Postdoctorals and research assistants in science Ph.D.-granting institutions: 1967-73**




SOURCE: National Science Foundation

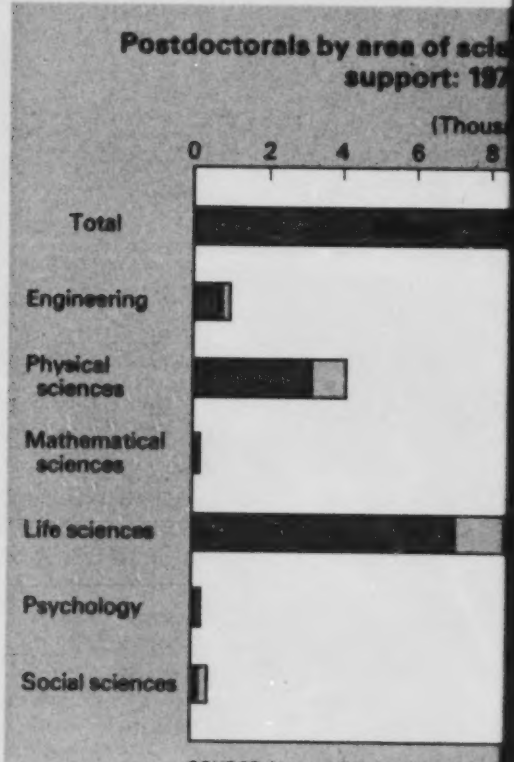


## GENERAL CHARACTERISTICS, FA

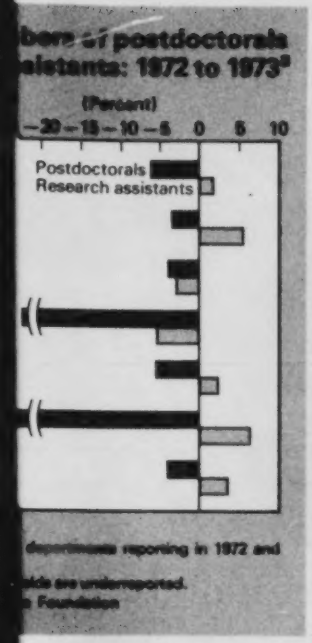
Of the 16,400 postdoctorals reported
departments in Ph.D.-granting institutions,
Federal research projects.[9] The highest per
postdoctorals occurred in the physical science
the social sciences—41 percent. More postdoc
sciences—10,500—than in any other area; the
physical sciences—4,100. Medical schools empl
all postdoctorals; 5,200 of these, or two-thirds
support. More postdoctorals were engaged by
than by private ones, but in private institu
percent—were supported on Federal projects

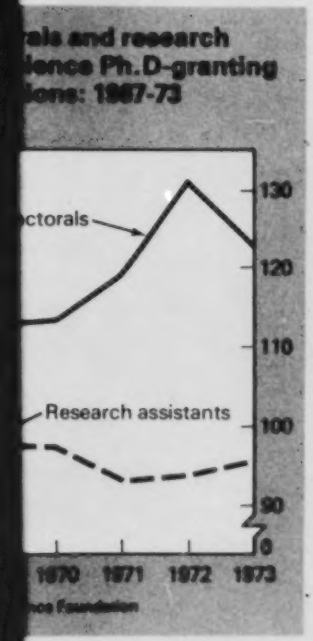
[9] For further details on postdoctorals, refer to appendi
this report.

**Postdoctorals by area of scie support: 197**




SOURCE: National Science Foundation

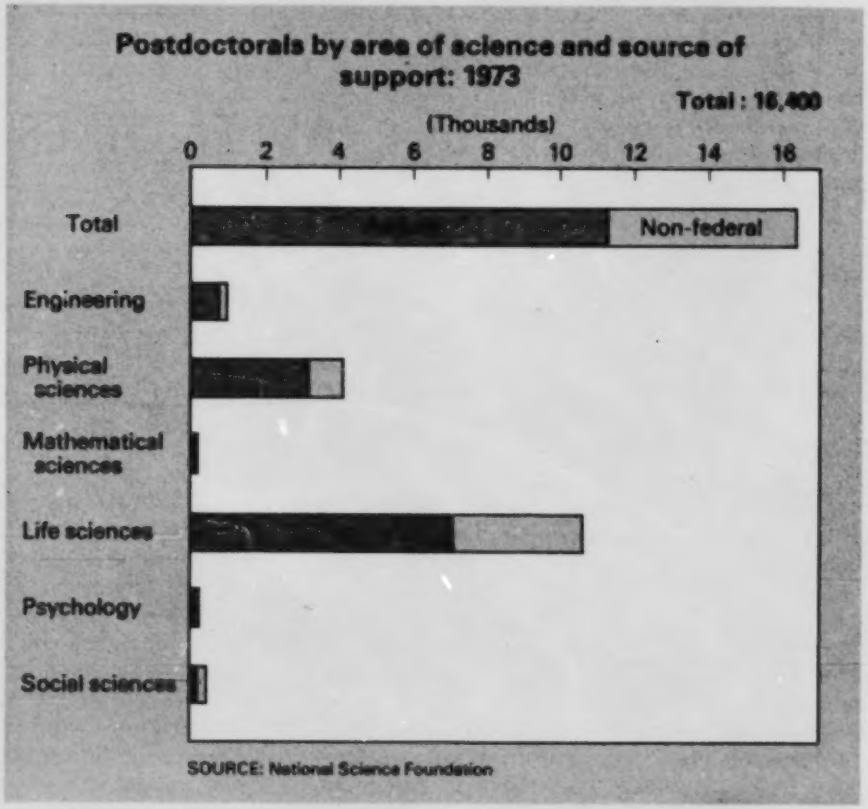



## GENERAL CHARACTERISTICS, FALL 1973

Of the 16,400 postdoctorals reported in 1973 by graduate science departments in Ph.D.-granting institutions, 69 percent were supported on Federal research projects.[9] The highest percentage of federally supported postdoctorals occurred in the physical sciences—77 percent—and the lowest in the social sciences—41 percent. More postdoctorals were employed in the life sciences—10,500—than in any other area; the next highest number were in the physical sciences—4,100. Medical schools employed nearly one-half —7,900—of all postdoctorals; 5,200 of these, or two-thirds, received some form of Federal support. More postdoctorals were engaged by public institutions—55 percent—than by private ones, but in private institutions, a higher percentage—71 percent—were supported on Federal projects than in public ones—67 percent.

[9] For further details on postdoctorals, refer to appendix III (page 80) and in appendix IV tables in this report.



# APPENDIXES

## I. Technical Notes

General Methodology
Assessment of Coverage, Consistency of Reporting, and Methodology of 1973 Survey: the Reliability and Validity Survey

## II. Classification of Institutions in Survey

## III. Statistical Tables

## IV. Instructions and Consolidated Departmental Data Sheets

**Note**

The detailed statistical tables for this volume have been published separately under one cover. A complete listing of the tables appears on p. 51. Detailed statistical tables may be obtained gratis from the National Science Foundation, Washington, D.C. 20550.

# APPENDIX I
# Technical Notes


| Table | | Page |
|---|---|---|
| I-1. | Number of participating institutions and departments in NSF data collection years: 1967-73 | 25 |
| I-2. | Comparison of graduate departments in the universe with those responding to the 1973 survey | 26 |
| I-3. | Percentage difference between 1973 survey results and weighted full-time enrollment obtained by field enumerators on types of major support | 27 |
| I-4. | Percentage difference between 1973 survey results and weighted full-time enrollment obtained by field enumerators on sources of major support | 27 |
| I-5. | Percentage difference between 1973 survey results and weighted data obtained by field enumerators on postdoctorals | 27 |
| I-6. | Comparison of student characteristics according to interviews and department records, with 95 percent confidence interval on net difference: 1973 | 28 |
| I-7. | Comparison of postdoctoral characteristics according to interviews and department records, with 95 percent confidence interval on net difference: 1973 | 28 |
| I-8. | Estimates of sampling error of observed differences for selected data cells: 1973 | 28 |
| I-9. | Number of students and postdoctorals selected to be interviewed and number actually interviewed: 1973 | 30 |
| I-10. | Comparison of enrollment data from 1973 survey with CGS survey results in selected graduate departments | 32 |
| I-11. | Comparison of data on types of support from 1973 CGS survey results in selected graduate departments | 33 |
| I-12. | Comparison of total graduate enrollment statistics from the Council of Graduate Schools with NSF's Survey of Graduate Science Student Support: 1972 to 1973 | 33 |
| I-13. | Comparison of first-year graduate enrollment statistics from the Council of Graduate Schools with NSF's Survey of Graduate Science Student Support: 1972 to 1973 | 33 |
| I-14. | Number of graduate departments in the 339 doctorate-granting institutions covered in the GSSS Survey, by area and field of science: 1973 | 34 |
| I-15. | List of top 100 institutions including affiliated medical schools, ranked on basis of total graduate enrollment: 1973 | 41 |

| | Page |
|---|---|
| nd ars: ..... | 25 |
| in the 1973 ..... | 26 |
| urvey ent es of ..... | 27 |
| urvey ent ces of ..... | 27 |
| urvey field ..... | 27 |
| accord- rds, net ..... | 28 |
| stics nt records, net ..... | 28 |




# APPENDIX I
# Technical Notes


| Table | | Page |
|---|---|---|
| I-8. | Estimates of sampling error of observed differences for selected data cells: 1973 ..... | 28 |
| I-9. | Number of students and postdoctorals selected to be interviewed and number actually interviewed: 1973 ..... | 30 |
| I-10. | Comparison of enrollment data from 1973 survey with CGS survey results in selected graduate departments ..... | 32 |
| I-11. | Comparison of data on types of support from 1973 CGS survey results in selected graduate departments ..... | 33 |
| I-12. | Comparison of total graduate enrollment statistics from the Council of Graduate Schools with NSF's Survey of Graduate Science Student Support: 1972 to 1973 ..... | 33 |
| I-13. | Comparison of first-year graduate enrollment statistics from the Council of Graduate Schools with NSF's Survey of Graduate Science Student Support: 1972 to 1973 ..... | 33 |
| I-14. | Number of graduate departments in the 339 doctorate-granting institutions covered in the GSSS Survey, by area and field of science: 1973 ..... | 34 |
| I-15. | List of top 100 institutions including affiliated medical schools, ranked on basis of total graduate enrollment: 1973 ..... | 41 |


## General Methodology

The institutional response rate in this survey was 100 percent; that is, every institution that was known to offer a science-doctorate program returned completed questionnaires from its graduate science and engineering departments. In 1973, as the result of NIH's special interest in the biomedical and clinical departments, survey coverage was expanded. The 339 medical and graduate school deans surveyed in 1973 returned 6,559 Departmental Data Sheets representing 876 master's and 5,683 doctorate departments.

The table I-1 provides the number of institutions and departments by level, in each year for which data are shown in this report. As stated earlier, in the Introduction, there were three populations covered in the data series: (1) 1967-71—based on data from application forms submitted to NSF's Graduate Traineeship Program; (2) 1972—a survey of graduate departments in institutions awarding the Ph.D. degree in the sciences and engineering; (3) 1973—expanded coverage to include biomedical and clinical departments.

**Table I-1. Number of participating institutions and departments in NSF data collection years: 1967-73**

| Year[1] | Number of institutions | Number of departments | | |
|---|---|---|---|---|
| | | Total | Master's | Doctorate |
| 1967 ..... | 209 | 3,016 | 436 | 2,580 |
| 1968 ..... | 219 | 3,190 | 454 | 2,736 |
| 1969 ..... | 224 | 3,354 | 460 | 2,894 |
| 1970 ..... | 227 | 3,544 | 473 | 3,071 |
| 1971 ..... | 224 | 3,397 | 407 | 2,990 |
| 1972 ..... | 302 | 4,637 | 826 | 3,811 |
| 1973 ..... | 339 | 6,559 | 876 | 5,683 |

[1] Years 1967-71 represent NSF's Graduate Traineeship Program; 1972 and 1973 were survey years.

## Assessment of Coverage, Consistency of Reporting, and Methodology of the 1973 Survey: the Reliability and Validity Survey

As part of the continuing effort by NSF and NIH to improve reliability and validity (R&V) of survey data, in Spring 1974 a contractor was engaged to conduct a field study of a sample of 30 graduate institutions, including 10 medical schools to determine the accuracy and completeness of data reported on the survey questionnaires. The R&V study was also designed to measure the sources and magnitude of response problems.

Three distinct quality checks of the 1973 survey data were undertaken: (1) an assessment of institutional and departmental records; (2) site visits to 120 science and engineering departments within 30 institutions; (3) a telephone survey of a sample of graduate students and postdoctorals to obtain first-hand data for comparison with departmental records.

## SUMMARY OF FINDINGS

Results of the R&V study are presented here in terms of the major purposes of the effort.

### A. Coverage

The survey mailing lists of institutions awarding the Ph.D. degree in science and engineering were taken in 1972 from the records maintained by the Fellowships Office of the National Research Council, updated in 1973 by adding institutions reporting Ph.D. as the highest offering in the 1973 Survey of Scientific Activities of Institutions of Higher Education, plus institutions listed in the 1973-74 Association of American Medical Colleges *Directory of American Medical Education*. As part of the quality check of the 1973 survey these sources of institutional coverage were compared with the most current version of each of the following:

1. *American Council on Education*, list of graduate schools granting science Ph.D.'s, updated on an ongoing basis for ACE research projects.
2. *The Campus Resources of Higher Education in the United States of America*, November 1973, published by the Academy for Educational Development, Inc., Washington, D.C.
3. *Higher Education: Education Directory, 1973-74*, published annually by the National Center for Educational Statistics, Office of Education, Department of Health, Education, and Welfare.

The following 14 schools with Ph.D. programs in the sciences and engineering were identified that had not been surveyed in 1972 or 1973:

| *Names of Eligible Institutions* | *Science Ph.D. Offered* |
|---|---|
| 1. University of Alabama in Huntsville, Ala. | Physics, mechanical engineering, electrical engineering |
| 2. Cleveland State University, Cleveland, Ohio | Chemistry |
| 3. East Texas State University, Commerce, Tex. | Psychology |
| 4. Lamar University, Beaumont, Tex. | Psychology |
| 5. University of Maryland, Baltimore County, Md*. | Mathematics, biological sciences |
| 6. University of Missouri in St. Louis, Mo.** | Chemistry, psychology |
| 7. New England Institute, Ridgefield, Conn. | Interdisciplinary science |
| 8. Northeast Louisiana University, Monroe, La. | Pharmacy |
| 9. Northern Arizona University, Flagstaff, Ariz. | Biology |
| 10. Oakland University, Rochester, Mich. | Systems engineering |
| 11. Old Dominion University, Norfolk, Va. | Civil engineering, electrical engineering, mechanics, thermal engineering |
| 12. Rand Graduate Institute, Santa Monica, Calif. | Policy studies |
| 13. Rosemead Graduate School of Psychology, Rosemead, Calif. | Counseling psychology |
| 14. Tennessee Technological University, Cookeville, Tenn. | Engineering |

* Branch campus of the University of Maryland System.
** Branch campus of the University of Missouri System.

Departmental coverage within all surveyed institutions (exclusive of the 14 that had not been surveyed) was assessed by comparing the eligible departments listed in the 1973-74 graduate school catalogs of each institution with their departmental responses to the 1973 survey. Results of this effort were tabulated and are shown in table I-2.

The difference of 1,317 departments (i.e., those listed in catalogs, but not responding in the survey) represents approximately 20 percent of the survey universe. In terms of the number of graduate students in the sciences and engineering enrolled in these missing departments, the 20 percent is undoubtedly a poor measure and seriously inflated. College catalogs tend to overstate program offerings and the missed departments are more likely to be smaller, newer, and less visible.

Limitations of the catalog search as a means for establishing such a universe were numerous, and the difficulties are summarized as follows:

**Table I-2. Comparis... universe with thos...**

| Area of science | |
|---|---|
| Total | |
| Engineering | |
| Physical sciences | |
| Mathematical sciences | |
| Life sciences | |
| Agriculture | |
| Basic medical sciences | |
| Other biosciences | |
| Health sciences | |
| Other health related | |
| Psychology | |
| Social sciences | |
| All other sciences, n.e.c. | |

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|---|---|---|
| 5. | University of Maryland, Baltimore County, Md*. | Mathematics, biological sciences |
| 6. | University of Missouri in St. Louis, Mo.** | Chemistry, psychology |
| 7. | New England Institute, Ridgefield, Conn. | Interdisciplinary science |
| 8. | Northeast Louisiana University, Monroe, La. | Pharmacy |
| 9. | Northern Arizona University, Flagstaff, Ariz. | Biology |
| 10. | Oakland University, Rochester, Mich. | Systems engineering |
| 11. | Old Dominion University, Norfolk, Va. | Civil engineering, electrical engineering, mechanics, thermal engineering |
| 12. | Rand Graduate Institute, Santa Monica, Calif. | Policy studies |
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Limitations of the catalog search as a means for establishing such a universe were numerous, and the difficulties are summarized as follows:

**Table I-2. Comparison of graduate departments in the universe with those responding to the 1973 survey**

| Area of science | Number of graduate departments in universe[1] | Number of graduate departments responding to the survey | Number of responses as percent of universe |
|---|---|---|---|
| Total | 7,876 | 6,559 | 83.3 |
| Engineering | 1,044 | 926 | 88.7 |
| Physical sciences | 768 | 713 | 92.8 |
| Mathematical sciences | 374 | 339 | 90.6 |
| Life sciences | 4,130 | 3,422 | 82.9 |
| Agriculture | 326 | 270 | 82.8 |
| Basic medical sciences | 965 | 813 | 84.2 |
| Other biosciences | 653 | 550 | 84.2 |
| Health sciences | 1,937 | 1,649 | 85.1 |
| Other health related | 249 | 140 | 56.2 |
| Psychology | 279 | 215 | 77.1 |
| Social sciences | 1,233 | 928 | 75.3 |
| All other sciences, n.e.c. | 48 | 16 | 33.3 |

[1] The universe has two components: The departments listed in the graduate school catalogs and in the *Directory of American Medical Education, 1973-74*.

1. The program and degree framework of a university do not always lend themselves to a breakdown by departments. The catalog reviewers had considerable difficulty in differentiating a department from what was termed a "Major", a "Program", or a "Specialization", or from what was an interdisciplinary department, committee, group, or area. This was a crucial problem, since the department was to be the reporting unit in the GSSS survey, and the catalog reviewers were not always able to tell whether a unit should be included in the survey universe.

2. Several institutions did not conform to the typical academic structure, complicating the procedure for compiling a universe. In general, the variations in types of organization among the institutions made the catalog search a difficult task. And, as more innovations are introduced into graduate education, such a task is likely to result in somewhat arbitrary decisions being made in order to categorize all programs.

### B. Field enumeration check on departmental records

How accurate are data supplied to NSF from departmental records on graduate science enrollment and sources of support of students and postdoctorals? To answer this question, the contractor sent teams of enumerators into the field to examine records maintained at 120 graduate departments at 30 institutions selected at random. A replication of departmental responses was done without reference to the original response in order not to bias the study. At the end of the field study, the sample was weighted to produce national estimates which were compared with the actual survey results to produce identification and measurement of response variance.[1]

*Results of the field enumeration check on departmental records.*

The overall 1973 survey results showing total graduate enrollment in science were found to be relatively accurate (table I-3). The field enumeration study produced an estimate of -1.2 percent (i.e., the published statistics understated by 1.2 percent the replicated data) when data from the quality check sample were weighted to national estimates.

As would be expected, since a student's *major* source of support may not have been known to the department chairmen or to the field enumerators, there was more variation in the source of support data. For instance, graduate research assistantship data are estimated to be understated by about 4 percent. Published statistics on holders of fellowships-traineeships appear to be overstated in the order of about 8 percent.

Also, the data reported on sources of major support indicated close agreement, with U.S. Government sources in total being overstated by less than 1 percent and non-U.S. Government sources underreported by only 2 percent (table I-4). Differences in reporting of individual sources of support were considerably larger. In general, the categories accounting for the largest numbers of students had the greatest consistency between department and field staff reports.

Information on the differences observed in the treatment of postdoctorals indicates that records available on these appointees at the department level are frequently not in a form required to respond to survey items, as the results show an overstatement of 7 percent of the actual total observed by the field teams (table I-5). Also, some confusion was encountered in classifying M.D.'s who were studying for a Ph.D. Here again, there are probably definitional problems that result in chairmen being unable to report accurately on the number and source of support of postdoctorals assigned to their departments.

[1] The 30 institutions' sample size were necessarily so small that only gross differences can be considered to be statistically significant.

**Table I-3. Percentage difference between 1973 survey results and weighted full-time enrollment obtained by field enumerators on types of major support**

| Type of major support | 1973 GSSS survey results | Percentage difference |
|---|---|---|
| Total, all types | 164,318 | -1.2 |
| Fellowships and traineeships | 34,135 | 7.6 |
| Graduate research assistantships | 36,111 | -3.9 |
| Graduate teaching assistantships | 43,395 | 2.0 |
| Other types of support | 50,677 | -9.0 |

**Table I-4. Percentage difference between 1973 survey results and weighted full-time enrollment obtained by field enumerators on sources of major support**

| Sources of major support | 1973 GSSS survey results | Percentage difference |
|---|---|---|
| Total, all sources | 164,318 | -1.2 |
| U.S. Government sources | 43,196 | .8 |
| NSF | 9,682 | -1.4 |
| NIH | 10,197 | -3.0 |
| Other | 23,317 | 3.0 |
| Non-U.S. Government sources | 121,122 | -2.0 |
| Institutional support | 68,448 | .7 |
| Self, loans, and family | 38,845 | -2.3 |
| Other | 13,779 | -13.9 |

**Table I-5. Percentage difference between 1973 survey results and weighted data obtained by field enumerators on postdoctorals**

| Sources of support | 1973 GSSS survey results | Percentage difference |
|---|---|---|
| Total, all postdoctorals | 16,358 | 7.0 |
| U.S. Government sources | 11,286 | 7.7 |
| Fellowships and traineeships | 4,595 | 13.5 |
| Research associates | 6,691 | 4.5 |
| Non-U.S. Government sources | 5,072 | 4.6 |



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| Fellowships and traineeships | 4,595 | 13.5 |
| Research associates | 6,691 | 4.5 |
| Non-U.S. Government sources | 5,072 | 4.6 |

*Limitations of the field enumeration check on departmental records*

Problems encountered in attempting to reconcile data obtained from a sample of departmental records with the survey responses submitted by these departments prevented a determination of a data set reflecting "true" graduate student characteristics. Among the major problems encountered were the following:

1. The field enumeration check of the 1973 graduate student data was the first one of its kind planned by NSF and the initial one conducted by the contractor. As a result, serious problems were encountered in connection with the schedule and level of effort proposed by the contractor. The schedule called for two-day visits to each campus. This included replication of questionnaries at four graduate departments, interviews with institutional officials, and telephone interviews with a sample of graduate students and postdoctorals. This two-day time limit was much too short for adequate coverage and undoubtedly influenced the quality of the findings produced by the field enumeration study. As a result of the tight schedule, the replicated questionnaire data produced by the contractor in the field enumeration was not always verified with institutional officials who supplied the original statistics as planned.
2. Of critical importance to the quality check was the assumption that source records examined by enumerators could be matched with actual counts of students reported in particular items on the original forms. This was often not the case and attempts to reconcile the student counts reported by the departments with the student characteristics data obtained by the field representatives were difficult.
3. Finally, the sample sizes for institutions and departments were so small that only gross differences can be considered to be statistically significant.

**C. Student and postdoctoral interviews.**

So that accuracy of departmental records could be assessed, or at least their consistency with student perceptions, a random sample was selected of graduate students and postdoctorals.[2] These students and postdoctorals were interviewed to obtain information on the characteristics of their graduate studies, including their major source of support. The field enumerators attempted to contact each of the students and postdoctorals by telephone in order to obtain data on various characteristics of their graduate studies to compare with the data that were extracted from the departmental records.

*Results of the student and postdoctoral interviews.*

In general, data from the student and postdoctoral interviews show a close correspondence with the results of the field

[2] For detailed information on sampling methodology, see p. 29.

enumeration counts. For example, there was zero net difference between the student interview data and the field enumeration count on the level of study; i.e., first year and beyond first (table I-6). The zero net difference indicates an offsetting number of positive and negative counts since the confidence interval at the 95-percent level is relatively large (-3.90 to 3.90).

The student interviews produced an estimate of the percentage of males in the sample that exceeds that obtained from the departmental files by only one-half of 1 percent and is probably due to recording errors. The student interview estimate of the percent of U.S. citizens was less than the estimate derived from departmental records by only 1.5 percent. The size of the confidence interval is approximately the same width as the sex estimates, indicating a close correspondence between the interviews and departmental records.

Sources and types of support showed the highest levels of variation, confirming the general findings from the overall reliability and validity study. The "major" source of support is not always known at either the department level or by individual students since these funds may be drawn from a pool representing multiple sources. For example, departmental personnel may be aware of sources that are utilized by a given student if the funds are channeled through the department; however, they may not be aware of other sources used, such as student loans or family support. Because of this uncertainty, departmental officials may tend to overreport students in the "other" category when they actually receive major sources of income from one of the specific categories listed on the questionnaire.

Similar data comparisons resulted from the interviews of postdoctorals. When related to the departmental records, the greatest variances were shown for sources of support (table I-7).

*Limitations of the student and postdoctoral interviews.*

As in the case of the quality check of departmental records, the student interview data are subject to serious limitations, as follows:

1. Student perceptions of the major source of support for their graduate studies may differ from actuality, and the departmental records may be a more accurate source of information in some cases. For example, U.S. Government funds may lose their identity to the student as they flow through various levels such as States and institutions. The student may erroneously perceive that the most immediate source of support, from which his paycheck may come, is the actual source. The student may be unaware that the institution receives his support from bulk grants under large Federal programs, for example.
2. Of the 450 targeted student interviews, 397 were actually conducted. The tabulated data thus may be subject to statistical bias because of nonresponse caused by the inability to locate students or refusal to cooperate even

**Table I-6. Comparison of student characteristics according to interviews and department records, with 95 percent confidence interval on net difference: 1973**

| Student characteristics | Percent distribution according to: | | |
|---|---|---|---|
| | Student interviews | Department records | 95 percent confidence interval on net difference |
| Total | 100.0 | 100.0 | |
| Citizenship: | | | |
| U.S. | 82.7 | 84.2 | -3.37 to .31 |
| Foreign | 17.3 | 15.8 | - .31 to 3.37 |
| Level of study: | | | |
| First year | 32.6 | 32.6 | -3.90 to 3.90 |
| Beyond first | 67.4 | 67.4 | -3.90 to 3.90 |
| Type of major support: | | | |
| Fellowships or traineeships | 32.8 | 30.9 | -1.87 to 5.73 |
| Research assistantships | 30.2 | 27.3 | - .96 to 6.75 |
| Teaching assistantships | 28.6 | 31.2 | -5.79 to .64 |
| Other types of support | 8.4 | 10.7 | -5.88 to 1.39 |
| Source of major support: | | | |
| U.S. Government | 26.4 | 31.6 | -9.52 to -.78 |
| Non-U.S. Government | 73.6 | 68.4 | 9.52 to .78 |
| Sex: | | | |
| Male | 82.1 | 81.6 | -1.54 to 2.05 |
| Female | 17.9 | 18.4 | -2.05 to 1.54 |

**Table I-7. Comparison of postdoctoral characteristics according to interviews and department records, with 95 percent confidence interval on net difference: 1973**

| Characteristic | Percent distribution according to: | | |
|---|---|---|---|
| | Postdoctoral interviews | Department records | 95 percent confidence interval on net difference |
| Received doctoral: | | | |
| Since 1969 | 75.8 | 73.5 | -2.6 to 7.3 |
| In 1969 or before | 24.2 | 26.5 | -7.3 to 2.6 |
| Source of support: | | | |
| U.S. sources | 71.6 | 64.8 | .3 to 13.2 |
| Non-U.S. sources | 28.4 | 35.2 | -13.2 to -.3 |

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**Table I-6. Comparison of student characteristics according to interviews and department records, with 95 percent confidence interval on net difference: 1973**

| Student characteristics | Percent distribution according to: Student interviews | Department records | 95 percent confidence interval on net difference |
|---|---|---|---|
| Total | 100.0 | 100.0 | |
| Citizenship: | | | |
| U.S. | 82.7 | 84.2 | -3.37 to .31 |
| Foreign | 17.3 | 15.8 | - .31 to 3.37 |
| Level of study: | | | |
| First year | 32.6 | 32.6 | -3.90 to 3.90 |
| Beyond first | 67.4 | 67.4 | -3.90 to 3.90 |
| Type of major support: | | | |
| Fellowships or traineeships | 32.8 | 30.9 | -1.87 to 5.73 |
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| Source of major support: | | | |
| U.S. Government | 26.4 | 31.6 | -9.52 to -.78 |
| Non-U.S. Government | 73.6 | 68.4 | 9.52 to .78 |
| Sex: | | | |
| Male | 82.1 | 81.6 | -1.54 to 2.05 |
| Female | 17.9 | 18.4 | -2.05 to 1.54 |

**Table I-7. Comparison of postdoctoral characteristics according to interviews and department records, with 95 percent confidence interval on net difference: 1973**

| Characteristic | Percent distribution according to: Postdoctoral interviews | Department records | 95 percent confidence interval on net difference |
|---|---|---|---|
| Received doctoral: | | | |
| Since 1969 | 75.8 | 73.5 | -2.6 to 7.3 |
| In 1969 or before | 24.2 | 26.5 | -7.3 to 2.6 |
| Source of support: | | | |
| U.S. sources | 71.6 | 64.8 | .3 to 13.2 |
| Non-U.S. sources | 28.4 | 35.2 | -13.2 to -.3 |

though adjustments were made to sample weights to account for the nonresponse.

3. Since the sample was very small when compared to national totals, the weighted sample data are subject to sampling errors and should be interpreted only in gross terms.

To elaborate on limitation 3 above, statistics on the characteristics of students in this section are estimates based on interviews with students chosen by a stratified random sample from the survey universe.

An estimate of the sampling error has been computed and table I-8 shows the sampling error for various data items listed on the stub, at one standard error.[3] To illustrate, the two estimates derived from the weighted sample estimates for "Total Full-time Graduate Students" produced a difference of 1,867 students. The estimated standard error at the two-thirds confidence interval is estimated at 3,791 students; i.e., the actual difference could range from -1,934 to 5,658 students at one standard error. The estimated standard errors of the differences of each student characteristic are large because of the relatively small number of sample units. In all cases, except the estimated number of postdoctorals, the standard errors approximately equal or exceed the differences, indicating a significant level of sampling error.

[3] For an explanation of how this statistic is derived see Morris H. Hansen, William N. Harwity, and William G. Marlow, *Sample Survey Methods and Theory*, Vol. 1, 1st ed. (New York: John Wiley and Sons, Inc., 1953), p. 228.

**Table I-8. Estimates of sampling error of observed differences for selected data cells: 1973**

| Item | Differences (R&V minus GSSS estimates) | Estimated standard errors of the differences (at 2/3 confidence interval) |
|---|---|---|
| Total full-time graduate students | 1,867 | 3,791 |
| Number receiving fellowships and traineeships | -2,084 | 2,044 |
| Number receiving support from U.S. Government | -314 | 1,222 |
| Number of first-year students | 795 | 2,739 |
| Number of male students | 1,748 | 3,225 |
| Number of postdoctorals | -1,394 | 635 |

## SAMPLE SELECTION METHODOLOGY FOR THE RELIABILITY AND VALIDITY CHECK

*Sample selection of 30 institutions*

The contractor designed and selected a stratified random sample of 30 institutions from the 235 graduate and 104 medical schools surveyed in 1973. Since the medical schools constituted nearly one-third of the total, 10 were selected for the study. Within each of the two sets of institutions, schools were selected systematically with probabilities proportional to the estimated number of graduate students in science departments plus the number of postdoctoral appointees in these departments in 1973. Since all of the 1973 department responses were not available early enough for use as the measures of size and others were not edited in time for the sample selection, 1972 enrollment data were used for this purpose. For graduate institutions, these data were taken from the 1972 survey, for medical schools, data were provided by NIH from other sources. (The 1972 survey enrollments could not be used for medical schools since most of the medical schools did not report enrollments separately in 1972).

If $M_i$ represented the estimated graduate plus postdoctoral enrollment referred to above for the $i^{th}$ medical school, its probability of selection for the R&V Study was $10\,M_i/M_m$, where $M_m$ (which equals 18,639) was the total of the $M_i$ values for all 104 medical schools. Similarly, the selection probability for the $i^{th}$ graduate institution was $20\,M_i/M_d$, where $M_d$ (which equals 159,109) was the total of the $M_i$ values for the 235 graduate institutions.

The selection of the 10 medical schools was made with probability proportional to size. The schools were ordered by estimated percent of total enrollment that was composed of postdoctorals. The ordered groups formed a sampling list. For each medical school the estimated graduate and postdoctoral enrollment, $M_i$, and the cumulative enrollment were listed. This cumulative enrollment, cum $(M_i)$, was computed for the $i^{th}$ school as follows:

$$\text{cum } (M_i) = \sum_{j=1}^{i} M_j$$

The value of cum $(M_i)$ was simply the sum of the enrollments of all schools listed before $i^{th}$ school plus the enrollment of the $i^{th}$ school.

The selection interval, I, was then computed as $M_m/12$; i.e., 18,639/12. Then, a random number, R, between 1 and I was selected from a table of random numbers. Twelve selection numbers were then computed as follows:

$$R,\ R + I,\ R + 2I,\ R + 3I,\ \ldots,\ R + 11I$$

Each selection number identified a possible selection for the R&V study. The school determined by a particular selection number was the first one on the list for which cum $(M_i)$ was equal to or greater than the selection number. This produced a sample of 12 medical schools, which were selected initially to provide possible substitute schools to replace nonparticipating schools. The 10 schools used as the main sample were picked with equal probability from the 12 schools initially selected. Hence, the selection probability for each medical school in the main sample was $10\,M_i/M$; i.e., $(12\,M_i/M)\ (10/12)$.

The 20 graduate institutions were selected in an analogous way. The 235 graduate institutions were first partitioned into three groups: Engineering, physical sciences, and mathematical sciences; life sciences; and psychology and social sciences. Within each of these groups, the schools were ordered by percent of enrollment represented by postdoctorals (as for medical schools). The three groups were then combined to form a single sampling list.

Twenty-three graduate institutions were selected from this ordered list, with probabilities proportional to size. Twenty of these institutions were picked at random for the main sample, with the other three serving as possible substitutes. The selection of the 23 graduate institutions was carried out in a manner similar to that described for the medical schools. In the case of the graduate schools the selection interval, I, was $M_d/23$ (i.e., 159,109/23). If R represented the random start, that is, a random number between 1 and I, the 23 selection numbers were the following:

$$R,\ R + I,\ R + 2I,\ \ldots,\ R + 22I$$

Twenty of the above 23 selection numbers were drawn at random to identify the initial sample, with the remaining three serving as possible substitutes.

*Sample selection of departments*

Four science departments were sampled from each of the 30 institutions that were selected for the R&V sample, providing 120 departments for the study. These departments were selected with probabilities proportional to the number (or estimated number) of graduate students plus postdoctorals they contained. As mentioned earlier, 1973 enrollment data were not available to use for the selection of the sample; therefore, the 1972 data were used as measures of departments sizes. For each of the few "new" science departments in 1973, an average enrollment for departments in the school in the same general classification was inputed as the measure of size.

The selection of four departments from each of the 30 institutions was carried out in a way similar to that used for the selection of schools. The departments in each graduate institution were first grouped by the three classifications mentioned above. Within each of these three groups departments were ordered by postdoctoral percent of enrollment. A similar ordering of medical school departments was used. Statisticians and analysts interested in the detailed sampling techniques used for department selection and calculation of weights may contact the Division of Science Resources Studies for further information.



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sample of 12 medical schools, which were selected initially to provide possible substitute schools to replace nonparticipating schools. The 10 schools used as the main sample were picked with equal probability from the 12 schools initially selected. Hence, the selection probability for each medical school in the main sample was 10 $M_i/M$; i.e., (12 $M_i/M$) (10/12).

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Twenty-three graduate institutions were selected from this ordered list, with probabilities proportional to size. Twenty of these institutions were picked at random for the main sample, with the other three serving as possible substitutes. The selection of the 23 graduate institutions was carried out in a manner similar to that described for the medical schools. In the case of the graduate schools the selection interval, I, was $M_d/23$ (i.e., 159,109/23). If R represented the random start, that is, a random number between 1 and I, the 23 selection numbers were the following:

$$R, R + I, R + 2I, \ldots, R + 22I$$

Twenty of the above 23 selection numbers were drawn at random to identify the initial sample, with the remaining three serving as possible substitutes.

*Sample selection of departments*

Four science departments were sampled from each of the 30 institutions that were selected for the R&V sample, providing 120 departments for the study. These departments were selected with probabilities proportional to the number (or estimated number) of graduate students plus postdoctorals they contained. As mentioned earlier, 1973 enrollment data were not available to use for the selection of the sample; therefore, the 1972 data were used as measures of departments sizes. For each of the few "new" science departments in 1973, an average enrollment for departments in the school in the same general classification was inputed as the measure of size.

The selection of four departments from each of the 30 institutions was carried out in a way similar to that used for the selection of schools. The departments in each graduate institution were first grouped by the three classifications mentioned above. Within each of these three groups departments were ordered by postdoctoral percent of enrollment. A similar ordering of medical school departments was used. Statisticians and analysts interested in the detailed sampling techniques used for department selection and calculation of weights may contact the Division of Science Resources Studies for further information.

Graduate and medical schools and the departments selected for the sample are given below.

**Graduate Schools and Departments Selected**

*University of Akron*
- Physics
- Psychology
- Urban Studies
- Biology

*Bowling Green State University*
- Mathematics
- Biology
- Psychology
- Political Science

*University of California at Los Angeles*
- Biology
- Urban Planning
- Energy & Kinetics
- Mechanics & Structures

*Carnegie-Mellon University*
- Electrical Engineering
- Metallurgy & Material Science
- Physics
- Biological Sciences

*University of Cincinnati*
- History
- Chemistry
- Mathematics
- Economics

*City University of New York*
- Psychology
- Speech
- Anthropology
- Chemistry

*Duke University*
- Political Science
- Physics
- Psychology
- Mathematics

*University of Illinois*
- Geography
- Electrical Engineering
- Mechanical & Industrial Engineering
- Chemistry

*Iowa State University*
- Agricultural Engineering
- Chemistry
- Zoology & Entomology
- Economics

*Johns Hopkins University*
- Earth & Planetary Science
- Chemistry
- Geography
- Political Economy

*University of Kentucky*
- Political Science
- Chemistry
- Mathematics
- Plant Physiology

*Massachusetts Institute of Technology*
- Electrical Engineering
- Civil Engineering
- Aeronautics & Astronautics
- Biology

*Michigan State University*
- Horticulture
- Political Science
- Physics
- Communications

*University of Oklahoma*
- Meteorology
- Political Science
- Botany & Microbiology
- Anthropology

*Oregon State University*
- Food Science & Technology
- Electrical & Computer Engineering
- Fish & Wildlife
- Oceanography

*Purdue University*
- Materials Engineering
- Civil Engineering
- Biology
- Physics

*Rensselaer Polytechnic Institute*
- Biomedical Engineering
- Mathematics
- Chemistry
- Electric Power Engineering

*Rutgers University*
- Animal Sciences
- Physics
- Civil & Environmental Engineering
- Sociology

*SUNY-College of Environmental Science and Forestry*
- Forest Chemistry
- World Forestry
- Paper Technology
- Engineering

*University of Texas at Austin*
- Civil Engineering
- Economics
- Psychology
- Sociology

**Medical Schools and Departments Selected**

*University of California, Davis Medical School*
- Behavioral Biology
- Biological Chemistry
- Pulmonary
- Infectious Diseases

*University of California, San Francisco Medical Center*
- Biochemistry & Biophysics
- Urology
- Medicine
- History of Health Science

*University of Colorado Medical Center*
- Biophysics & Human Genetics
- Anatomy
- Gastroenterology
- Dermatology

*University of Minnesota, Minneapolis Medical School*
- Pharmacology
- Biochemistry
- Surgery
- Medicine

*University of North Carolina Medical School*
- Pathology
- Biochemistry & Nutrition
- Biomedical Engineering & Mathematics
- Cardiology

*University of Oklahoma Health Sciences Center*
- Cardiology
- Psychiatry & Behavioral Science
- Obstetrics & Gynecology
- Biochemistry & Molecular Biology

*University of Southern California Medical School*
- Biological Chemistry
- Pathology
- Pediatrics
- Physiology

*Sample selection of students and postdoctorals*

The sample of students and postdoctorals to be intervi completed questionnaries, 450 from graduate students a number selected and number of completed interviews are

**Table I-9. Number of students and postd interviewed and number actually i**

| Students and postdoctorals | Number selected | | |
|---|---|---|---|
| | Total | Medical schools | Gradua institutio |
| Total ..... | 725 | 213 | 512 |
| Graduate students ..... | 529 | 118 | 411 |
| Postdoctorals ..... | 196 | 95 | 101 |

*egon State University*
Food Science & Technology
Electrical & Computer Engineering
Fish & Wildlife
Oceanography

*due University*
Materials Engineering
Civil Engineering
Biology
Physics

*sselaer Polytechnic Institute*
Biomedical Engineering
Mathematics
Chemistry
Electric Power Engineering

*gers University*
Animal Sciences
Physics
Civil & Environmental Engineering
Sociology

*NY-College of Environmental Science and Forestry*
Forest Chemistry
World Forestry
Paper Technology
Engineering

*versity of Texas at Austin*
Civil Engineering
Economics
Psychology
Sociology

**Medical Schools and Departments Selected**

*University of California, Davis*
*Medical School*
Behavioral Biology
Biological Chemistry
Pulmonary
Infectious Diseases

*University of California, San Francisco Medical Center*
Biochemistry & Biophysics
Urology
Medicine
History of Health Science

*University of Colorado Medical Center*
Biophysics & Human Genetics
Anatomy
Gastroenterology
Dermatology

*University of Minnesota, Minneapolis*
*Medical School*
Pharmacology
Biochemistry
Surgery
Medicine

*University of North Carolina*
*Medical School*
Pathology
Biochemistry & Nutrition
Biomedical Engineering & Mathematics
Cardiology

*University of Oklahoma Health Sciences Center*
Cardiology
Psychiatry & Behavioral Science
Obstetrics & Gynecology
Biochemistry & Molecular Biology

*University of Southern California*
*Medical School*
Biological Chemistry
Pathology
Pediatrics
Physiology

*University of Texas Health Science Center*
Biological Chemistry
Obstetrics & Gynecology
Internal Medicine
Physiology

*University of Wisconsin Medical School*
Neurophysiology
Genetics
Hematology
Otolaryngology

*Yale School of Medicine*
Molecular Biophysics & Biochemistry
Otolaryngology
Epidemiology & Public Health
Pharmacology

*Sample selection of students and postdoctorals*

The sample of students and postdoctorals to be interviewed was designed to yield about 600 completed questionnaries, 450 from graduate students and 150 from postdoctorals. The actual number selected and number of completed interviews are shown in table I-9.

**Table I-9. Number of students and postdoctorals selected to be interviewed and number actually interviewed: 1973**

| Students and postdoctorals | Number selected | | | Number interviewed | | |
|---|---|---|---|---|---|---|
| | Total | Medical schools | Graduate institutions | Total | Medical schools | Graduate institutions |
| Total | 725 | 213 | 512 | 558 | 196 | 362 |
| Graduate students | 529 | 118 | 411 | 397 | 72 | 325 |
| Postdoctorals | 196 | 95 | 101 | 161 | 124 | 37 |

**The questionnaire used for the interviews follows. Further details on the selection of students and postdoctorals can be obtained by contacting the Division of Science Resources Studies.**

OMB No. 99 F-74006
Expires August 31, 1974

Institution _____
Department _____
Interviewer _____
Date _____

## TELEPHONE QUESTIONNAIRE

Hello, my name is _____ I am with Westat, Inc., a national research company. We are conducting a nationwide survey for the National Science Foundation. The survey is concerned with colleges and universities granting advanced degrees in scientific fields. As part of this survey, we are calling some students (postdoctorals) in order to ask them a few questions. This will take only a few minutes and your cooperation will be greatly appreciated. All your answers will be kept strictly confidential and will be used for statistical purposes only.

1. During the Fall of 1973, were you enrolled at (Name of Institution)

   Yes (Go to Q.2) ..... 1
   No ..... 2

   (Do not accept a "No" answer without probing. Ask: During the Fall of 1973 you *were not* a student (postdoctoral) at (Name of Institution)? If the respondent insists on a "No" answer, thank him and terminate the interview).

2. In which department were you enrolled: _____

3. At that time were you enrolled in an advanced degree program?

   Yes ..... 1
   No ..... 2

3.A. Were you a

   Graduate student ..... 1 (Go to Q.5)
   Postdoctoral ..... 2 (Go to Q.4)
   Neither ..... 3 (Terminate Interview)

**FOR POSTDOCTORALS ONLY**

4. Did your support come from:

   U.S. Government sources ..... 1
   Non-U.S. Government sources ..... 2

4.A Was your appointment for:

   A fellowship ..... 1
   A traineeship ..... 2
   Research associate ..... 3
   Other (specify) ..... 4

4.B In what year did you receive your doctoral (M.D.) degree? _____

**FOR POSTDOCTORALS TERMINATE INTERVIEW HERE.**

5. In the Fall of 1973 were you enrolled as a full time, part time or special student?

   Full time ..... 1
   Part time ..... 2
   Special ..... 3 Terminate Interview

6. At that time had you completed:

   Less than a full year of graduate study ..... 1
   One year or more of graduate study ..... 2

(For students who had answered "par
terminate interview after getting an a
graduate students continue Q.7.)

7. Not including tuition, did you receive any type of f
of 1973? (Do not include government loans.)

   Yes (Go to Q.8) .....
   No (Skip to Q.9) .....

8. What type of support did you receive in the fall
   Fellowship or traineeship
   Graduate research assistar
   Graduate teaching assistar
   Other (specify) .....

9. We are interested in determining how full time gra
themselves in the Fall of 1973. Considering your t
time, *but not including tuition or government loans*
sources of support and what percentages of the

   First Source _____
   Second Source _____
   Third Source _____
   Fourth Source _____

   (Interviewer: If the sources named by
   up to 80%, ask for other sources until
   Probe for specific sources. For instar
   probe for which agency within HEW,
   the Veterans Administration is not me
   main sources above, ask Q. 9A, Othe

9.A Were you receiving any Veterans Benefits under

   Yes .....
   No .....

10. In the Fall of 1973, were you a citizen of the U.S.

   Yes .....
   No .....

11. (Interviewer, fill in):

   Male .....
   Female .....

Detach this portion and destroy following home offic
information.
Student's Name _____
Student's Address _____
_____
Student's Area Code _____ Telephone N

**THANK YOU FOR YOUR**

tionnaire used for the interviews follows. Further details on the selection of students and postdoctorals can be obtained by the Division of Science Resources Studies.

OMB No. 99 F-74006
Expires August 31, 1974

Institution _____
Department _____
Interviewer _____
Date _____

**HONE QUESTIONNAIRE**

_____ I am with Westat, Inc., a national research company.
vey for the National Science Foundation. The survey is
es granting advanced degrees in scientific fields. As part of
ts (postdoctorals) in order to ask them a few questions. This
operation will be greatly appreciated. All your answers will
e used for statistical purposes only.

enrolled at (Name of Institution)

Q.2) ..... 1
..... 2

answer without probing. Ask: During the
*not* a student (postdoctoral) at (Name of
ondent insists on a "No" answer, thank him
rview).

rolled: _____ —

an advanced degree program?
..... 1
..... 2

udent ..... 1 (Go to Q.5)
l ..... 2 (Go to Q.4)
..... 3 (Terminate Interview)

nment sources ..... 1
overnment sources ..... 2

..... 1
..... 2
..... 3
..... 4

doctoral (M.D.) degree? _____
**INTERVIEW HERE.**

d as a full time, part time or special student?
..... 1
..... 2
..... 3 Terminate Interview

full year of graduate study ..... 1
more of graduate study ..... 2

(For students who had answered "part time" in response to Q.5, terminate interview after getting an answer to Q.6. For full time graduate students continue Q.7.)

7. Not including tuition, did you receive any type of financial support in the Fall of 1973? (Do not include government loans.)
   Yes (Go to Q.8) ..... 1
   No (Skip to Q.9) ..... 2

8. What type of support did you receive in the fall of 1973?
   Fellowship or traineeship ..... 1
   Graduate research assistantship ..... 2
   Graduate teaching assistantship ..... 3
   Other (specify) ..... 4

9. We are interested in determining how full time graduate students supported themselves in the Fall of 1973. Considering your total financial needs at that time, *but not including tuition or government loans*, please tell me your major sources of support and what percentages of the total each accounted for:

| | % |
|---|---|
| First Source _____ | _____ |
| Second Source _____ | _____ |
| Third Source _____ | _____ |
| Fourth Source _____ | _____ |

(Interviewer: If the sources named by the respondent do not add up to 80%, ask for other sources until the 80% figure is reached. Probe for specific sources. For instance, if the answer is HEW, probe for which agency within HEW, such as NIH, NDEA, etc. If the Veterans Administration is not mentioned as one of the three main sources above, ask Q. 9A, Otherwise, go to Q. 10)

9.A Were you receiving any Veterans Benefits under the GI Bill of Rights?
   Yes ..... 1
   No ..... 2

10. In the Fall of 1973, were you a citizen of the U.S.?
   Yes ..... 1
   No ..... 2

11. (Interviewer, fill in):
   Male ..... 1
   Female ..... 2

---

Detach this portion and destroy following home office coding to insure confidentiality of student information.

Student's Name _____
Student's Address _____
_____
Student's Area Code _____ Telephone No. _____

**THANK YOU FOR YOUR COOPERATION**



'78

'79

## COVERAGE OF DATA COMPARABILITY BETWEEN THE NSF SURVEY OF GRADUATE SCIENCE STUDENT SUPPORT AND OTHER SURVEYS OF GRADUATE STUDENTS

The National Center for Educational Statistics (NCES) within the Department of Health, Education, and Welfare acquires enrollment data as part of its Higher Education General Information Survey (HEGIS), conducted annually. The 15th Annual survey of Students Enrolled for Advanced Degrees (SEAD) was conducted in Fall 1973 as part of this series. The most recent publication representing the results of this survey, however, appeared in 1974 and represented Fall 1971 graduate enrollment in master's and Ph.D.-granting institutions. Thus, comparability between NCES and NSF's 1972 and 1973 surveys of graduate science enrollment cannot be calculated at this time. However, the NSF traineeship data for 1971 (before the 1973 survey was expanded to approximate universe coverage of graduate science departments) were compared in a prior publication with the results of the SEAD for that year, and it was found that over 87 percent of all graduate science enrollment in the United States had been accounted for in the NSF traineeship applications.[4]

The Council of Graduate Schools in the United States (CGS) conducted its annual enrollment survey of 308 members in 1973, requesting deans of both master's and doctorate-granting institutions to provide full- and part-time graduate enrollment and type of support in the following disciplines: education, humanities, social sciences (anthropology, business, economics, geography, history, political science, and sociology), physical sciences (chemistry, computer science, geology, mathematics, physics, and statistics), engineering, and biological sciences (agriculture, biology, health professions, home economics, psychology, and zoology). This taxonomy differs considerably from that used in both the SEAD and the NSF surveys. For example, NSF does not survey nonscience fields, and excludes business and history from the social sciences. As noted above, the CGS survey considers computer sciences, mathematics, and statistics to be in the physical sciences, while NSF treats these fields separately as mathematical sciences. Also, home economics and psychology are included by CGS under biological sciences while NSF does not treat home economics as a science and considers the biological sciences as part of the life sciences. With these differences in mind, tables I-10 and I-11 have been included to illustrate the overall findings of the two surveys in regard to the science-doctorate-granting institutions. Master's institutions were not surveyed by NSF.

[4] See National Science Foundation, *Graduate Science Education: Student Support and Postdoctorals, Fall 1972* (NSF 73-315), appendix I, table B (Washington, D.C. 20402: Supt. of Documents, U.S. Government Printing Office, 1974).





**Table I-10. Comparison of total graduate enrollment statist from the Council of Graduate Schools with NSF's Survey of Graduate Science Student Support: 1972 to 1973**

| Area of science | Total graduate enrollment | | Control of i Public | |
|---|---|---|---|---|
| | CGS | NSF | CGS | NSF |
| Total, all areas: | | | | |
| 1973 | 274,350 | 217,962 | 198,993 | 151,830 |
| 1972 | 268,606 | 210,895 | 194,733 | 146,663 |
| Percent change | 2.1 | -1.0 | 2.2 | -1.1 |
| Engineering | | | | |
| 1973 | 45,830 | 52,251 | 30,299 | 32,571 |
| 1972 | 45,819 | 51,624 | 30,703 | 32,523 |
| Percent change | (1) | -1.8 | -1.3 | -.8 |
| Physical sciences[2] | | | | |
| 1973 | 47,877 | 51,508 | 35,620 | 36,580 |
| 1972 | 48,777 | 51,172 | 35,892 | 36,247 |
| Percent change | -1.8 | -2.5 | -.8 | -2.8 |
| Biological sciences[3] | | | | |
| 1973 | [4]70,097 | 65,634 | [4]56,434 | 49,612 |
| 1972 | [4]65,523 | 60,005 | [4]52,756 | 44,951 |
| Percent change | 6.9 | 1.9 | 6.9 | 10.4 |
| Social sciences | | | | |
| 1973 | [5]110,546 | [6]48,569 | [5]76,640 | [6]33,067 |
| 1972 | [5]108,487 | 48,094 | [5]75,382 | 32,942 |
| Percent change | 1.9 | -2.0 | 1.7 | -1.3 |

[1] Less than 0.5 percent.
[2] Includes mathematical sciences.
[3] Includes psychology.
[4] Includes home economics (CGS only).
[5] Includes business and history (CGS only).
[6] Includes all other sciences not elsewhere classified.
Note: Percent changes are for matched departments.
Source: NSF Survey of Graduate Science Student Support, 1973; Counci *Communicator;* Special Report #2, dated September, 1974.

**Table I-10. Comparison of total graduate enrollment statistics from the Council of Graduate Schools with NSF's Survey of Graduate Science Student Support: 1972 to 1973**

| Area of science | Total graduate enrollment | | Control of institution | | | |
|---|---|---|---|---|---|---|
| | | | Public | | Private | |
| | CGS | NSF | CGS | NSF | CGS | NSF |
| Total, all areas: | | | | | | |
| 1973 | 274,350 | 217,962 | 198,993 | 151,830 | 75,357 | 66,132 |
| 1972 | 268,606 | 210,895 | 194,733 | 146,663 | 73,873 | 64,232 |
| Percent change | 2.1 | -1.0 | 2.2 | -1.1 | 2.0 | -.8 |
| Engineering | | | | | | |
| 1973 | 45,830 | 52,251 | 30,299 | 32,571 | 15,531 | 19,680 |
| 1972 | 45,819 | 51,624 | 30,703 | 32,523 | 15,116 | 19,101 |
| Percent change | ([1]) | -1.8 | -1.3 | -.8 | 2.8 | -3.6 |
| Physical sciences[2] | | | | | | |
| 1973 | 47,877 | 51,508 | 35,620 | 36,580 | 12,257 | 14,928 |
| 1972 | 48,777 | 51,172 | 35,892 | 36,247 | 12,885 | 14,925 |
| Percent change | -1.8 | -2.5 | -.8 | -2.8 | -4.9 | -1.6 |
| Biological sciences[3] | | | | | | |
| 1973 | [4]70,097 | 65,634 | [4]56,434 | 49,612 | [4]13,663 | 16,022 |
| 1972 | [4]65,523 | 60,005 | [4]52,756 | 44,951 | [4]12,767 | 15,054 |
| Percent change | 6.9 | 1.9 | 6.9 | 10.4 | 7.0 | 7.0 |
| Social sciences | | | | | | |
| 1973 | [5]110,546 | [6]48,569 | [5]76,640 | [6]33,067 | [5]33,906 | [6]15,502 |
| 1972 | [5]108,487 | 48,094 | [5]75,382 | 32,942 | [5]33,105 | 15,152 |
| Percent change | 1.9 | -2.0 | 1.7 | -1.3 | 2.4 | -3.6 |

[1] Less than 0.5 percent.
[2] Includes mathematical sciences.
[3] Includes psychology.
[4] Includes home economics (CGS only).
[5] Includes business and history (CGS only).
[6] Includes all other sciences not elsewhere classified.
Note: Percent changes are for matched departments.
Source: NSF Survey of Graduate Science Student Support, 1973; Council of Graduate Schools, *Communicator;* Special Report #2, dated September, 1974.

Total graduate science enrollment as reported to NSF amounted to 218,000 students; the CGS survey accounted for 274,000 students. This difference occurred primarily in the social sciences, where the fields included are not comparable, as described above.

In a further attempt to determine comparability between the two sources, the contractor for the NSF survey was asked to determine the number of students reported in 80 science departments in graduate schools out of the 120 that were selected for the reliability and validity (R&V) study.[1] Data from these departments were compared with results from the CGS survey on these same departments to determine the extent of the individual differences. Of the 80 departments examined, a maximum of 49 were considered comparable enough for a meaningful analysis of full-time enrollment, primarily due to the differing concepts inherent in the two surveys: CGS partitions the data into academic programs or disciplines; NSF into academic departments. In many departments the two methods resulted in almost identical student counts, in others they did not. Summarized in table I-12 are the results of the comparison of individual departments. Four responses with variances of over 100 students accounted for the substantial difference in total full-time students; discrepancies of this magnitude must be attributed to substantial coverage and/or definitional differences.

[1] See technical notes, p. 25, for description of the R&V study.

**Table I-11. Comparison of first-year graduate enrollment statistics from the Council of Graduate Schools with NSF's Survey of Graduate Science Student Support: 1972 to 1973**

| Area of science | Total graduate enrollment | | Control of institution | | | |
|---|---|---|---|---|---|---|
| | | | Public | | Private | |
| | CGS | NSF | CGS | NSF | CGS | NSF |
| Total, all areas: | | | | | | |
| 1973 | 75,534 | 76,224 | 54,492 | 53,263 | 21,042 | 22,961 |
| 1972 | 72,403 | 71,136 | 52,123 | 50,258 | 20,280 | 20,879 |
| Percent change | 4.3 | .3 | 4.5 | -.9 | 3.8 | 3.2 |
| Engineering | | | | | | |
| 1973 | 12,804 | 23,180 | 8,433 | 14,201 | 4,371 | 8,979 |
| 1972 | 12,078 | 21,144 | 7,873 | 13,819 | 4,205 | 7,325 |
| Percent change | 6.0 | 4.9 | 7.1 | 2.4 | 3.9 | 9.9 |
| Physical sciences[1] | | | | | | |
| 1973 | 11,441 | 15,831 | 8,669 | 11,404 | 2,772 | 4,427 |
| 1972 | 10,838 | 15,386 | 8,055 | 11,054 | 2,783 | 4,332 |
| Percent change | 5.6 | -2.9 | 7.6 | -3.7 | ([2]) | -1.0 |
| Biological sciences[3] | | | | | | |
| 1973 | [4]18,842 | 20,940 | [4]14,585 | 15,980 | [4]4,257 | 4,960 |
| 1972 | 17,765 | 18,334 | 13,902 | 13,880 | 3,863 | 4,454 |
| Percent change | 6.1 | 2.7 | 4.9 | 1.1 | 10.2 | 8.3 |
| Social sciences | | | | | | |
| 1973 | [5]32,447 | [6]16,273 | [5]22,805 | [6]11,678 | [5]9,642 | [6]4,595 |
| 1972 | [5]31,722 | 16,273 | [5]22,293 | 11,505 | [5]9,429 | 4,768 |
| Percent change | 2.3 | -5.3 | 2.3 | -4.5 | 2.3 | -7.2 |

[1] Includes mathematical sciences.
[2] Less than 0.5 percent.
[3] Includes psychology.
[4] Includes home economics (CGS only).
[5] Includes business and history (CGS only).
[6] Includes all other sciences not elsewhere classified.
Note: Percent changes are for matched departments.
Source: NSF Survey of Graduate Science Student Support, 1973; Council of Graduate Schools, *Communicator;* Special Report #2, dated September, 1974.

reported to NSF
vey accounted for
marily in the social
t comparable, as

bility between the
rvey was asked to
ed in 80 science
ne 120 that were
study.[5] Data from
ults from the CGS

of the R&V study.

survey on these same departments to determine the extent of the individual differences. Of the 80 departments examined, a maximum of 49 were considered comparable enough for a meaningful analysis of full-time enrollment, primarily due to the differing concepts inherent in the two surveys: CGS partitions the data into academic programs or disciplines; NSF into academic departments. In many departments the two methods resulted in almost identical student counts, in others they did not. Summarized in table I-12 are the results of the comparison of individual departments. Four responses with variances of over 100 students accounted for the substantial difference in total full-time students; discrepancies of this magnitude must be attributed to substantial coverage and/or definitional differences.

**Comparison of first-year graduate enrollment statistics**
**e Council of Graduate Schools with NSF's Survey**
**raduate Science Student Support: 1972 to 1973**

| Total graduate enrollment | | Control of institution | | | |
|---|---|---|---|---|---|
| | | Public | | Private | |
| CGS | NSF | CGS | NSF | CGS | NSF |
| 75,534 | 76,224 | 54,492 | 53,263 | 21,042 | 22,961 |
| 72,403 | 71,136 | 52,123 | 50,258 | 20,280 | 20,879 |
| 4.3 | .3 | 4.5 | -.9 | 3.8 | 3.2 |
| 12,804 | 23,180 | 8,433 | 14,201 | 4,371 | 8,979 |
| 12,078 | 21,144 | 7,873 | 13,819 | 4,205 | 7,325 |
| 6.0 | 4.9 | 7.1 | 2.4 | 3.9 | 9.9 |
| 11,441 | 15,831 | 8,669 | 11,404 | 2,772 | 4,427 |
| 10,838 | 15,386 | 8,055 | 11,054 | 2,783 | 4,332 |
| 5.6 | -2.9 | 7.6 | -3.7 | (2) | -1.0 |
| [4]18,842 | 20,940 | [4]14,585 | 15,980 | [4]4,257 | 4,960 |
| 17,765 | 18,334 | 13,902 | 13,880 | 3,863 | 4,454 |
| 6.1 | 2.7 | 4.9 | 1.1 | 10.2 | 8.3 |
| [5]32,447 | [6]16,273 | [5]22,805 | [6]11,678 | [5]9,642 | [6]4,595 |
| [5]31,722 | 16,273 | [5]22,293 | 11,505 | [5]9,429 | 4,768 |
| 2.3 | -5.3 | 2.3 | -4.5 | 2.3 | -7.2 |

ciences.

cs (CGS only).
story (CGS only).
es not elsewhere classified.
e for matched departments.
raduate Science Student Support, 1973; Council of Graduate Schools,
crt #2, dated September, 1974.

**Table I-12. Comparison of enrollment data from 1973 survey with CGS survey results in selected graduate departments**

| Enrollment status | Number of departments compared | Number of graduate students | | CGS survey as percent of GSSS survey |
|---|---|---|---|---|
| | | GSSS survey | CGS survey | |
| Full-time ..... | 49 | 4,846 | 4,213 | 86.9 |
| First year .... | 45 | 1,352 | 1,417 | 104.8 |
| Part-time ..... | 42 | 1,258 | 1,433 | 113.9 |
| First year .... | 40 | 599 | 561 | 93.7 |

When full-time enrollment from both surveys was compared in terms of mechanisms of support, the NSF survey results were consistently higher than data from the CGS survey except first-year research assistants which were virtually identical (table I-13).

**Table I-13. Comparison of data on types of support from 1973 survey with CGS survey results in selected graduate departments**

| Type of support of full-time students | Number of departments compared | Number of graduate students | | CGS survey as percent of GSSS survey |
|---|---|---|---|---|
| | | GSSS survey | CGS survey | |
| Fellowships and trainee-ships ..... | 43 | 924 | 672 | 72.7 |
| First year .. | 35 | 264 | 192 | 72.7 |
| Teaching assistant-ships ..... | 48 | 1,576 | 1,529 | 97.0 |
| First year .. | 40 | 430 | 376 | 87.4 |
| Research assistant-ships ..... | 47 | 1,075 | 926 | 86.1 |
| First year .. | 38 | 190 | 192 | 101.2 |

**Table I-14. Number of graduate departments in the 339 doctorate-granting institutions covered in the GSSS survey, by area and field of scie**

| Area, field of science, and departmental title | Total | Master's departments | Doctorate departments |
|---|---|---|---|
| Total | 6,559 | 876 | 5,683 |
| Engineering | 926 | 189 | 737 |
| Aeronautical, total | 35 | 5 | 30 |
| Aeronautical and astronautical engineering | 3 | ..... | 3 |
| Aeronautical engineering | 1 | ..... | 1 |
| Aeronautics | 2 | ..... | 2 |
| Aeronautic and astronautics | 6 | ..... | 6 |
| Aerospace engineering | 21 | 4 | 17 |
| Aerospace engineering and engineering physics | 2 | 1 | 1 |
| Agricultural, total | 47 | 19 | 28 |
| Agricultural and irrigation engineering | 1 | ..... | 1 |
| Agricultural engineering | 41 | 17 | 24 |
| Chemical and paper engineering | 1 | 1 | ..... |
| Wood products engineering | 1 | ..... | 1 |
| Wood Technology | 3 | 1 | 2 |
| Chemical, total | 111 | 15 | 96 |
| Chemical and metallurgical engineering | 5 | 1 | 4 |
| Chemical and nuclear engineering | 2 | ..... | 2 |
| Chemical engineering and materials science | 4 | ..... | 4 |
| Chemical engineering | 94 | 11 | 83 |
| Plastics | 1 | 1 | ..... |
| Textiles | 5 | 2 | 3 |
| Civil, total | 125 | 25 | 100 |
| Civil and environmental engineering | 7 | ..... | 7 |
| Civil and geological engineering | 1 | ..... | 1 |
| Civil engineering | 104 | 25 | 79 |
| Civil engineering and engineering mechanics | 2 | ..... | 2 |
| Environmental engineering | 5 | ..... | 5 |
| Environmental sciences and engineering | 6 | ..... | 6 |
| Electrical, total | 132 | 21 | 111 |
| Electrical computer science | 4 | ..... | 4 |
| Electrical engineering | 127 | 21 | 106 |
| Electronics and Instrumental | 1 | ..... | 1 |
| Engineering science, total | 52 | 5 | 47 |
| Applied mechanics | 6 | ..... | 6 |
| Applied science | 3 | 2 | 1 |
| Engineering acoustics | 1 | ..... | 1 |
| Engineering and applied physics | 1 | ..... | 1 |
| Engineering and applied science | 1 | ..... | 1 |
| Engineering mechanics | 17 | 1 | 16 |
| Engineering physics | 1 | ..... | 1 |
| Engineering science | | | |
| Fluid dynamics | | | |
| Mechanical science | | | |
| Mechanics | | | |
| Mechanics and hydraulics | | | |
| Theoretical and applied mechanics | | | |
| Industrial, total | | | |
| Administrative science | | | |
| Engineering Management | | | |
| Industrial communication engineering | | | |
| Industrial engineering and management science | | | |
| Industrial engineering and operations research | | | |
| Industrial engineering | | | |
| Industrial management | | | |
| Management | | | |
| Management engineering | | | |
| Management science | | | |
| Manufacturing engineering | | | |
| Operations research | | | |
| Systems engineering | | | |
| Mechanical, total | | | |
| Aerospace and mechanical engineering | | | |
| Architectural engineering | | | |
| Marine engineering and naval architecture | | | |
| Mechanical and aeronautical engineering and material science | | | |
| Mechanical and industrial engineering | | | |
| Mechanical engineering and applied mechanics | | | |
| Mechanical engineering | | | |
| Naval architecture | | | |
| Transportation | | | |
| Welding engineering | | | |
| Metallurgical, total | | | |
| Ceramic engineering | | | |
| Ceramics | | | |
| Material science | | | |
| Materials engineering | | | |
| Metallurgical and materials engineering | | | |
| Metallurgical engineering | | | |
| Metallurgy | | | |
| Solid state science and technology | | | |
| Mining, total | | | |
| Geological engineering | | | |
| Mineral engineering | | | |
| Mineral preparation | | | |

**r of graduate departments in the 339 doctorate-granting institutions covered in the GSSS survey, by area and field of science: 1973**

| tal title | Total | Master's departments | Doctorate departments |
|---|---|---|---|
| | 6,559 | 876 | 5,683 |
| | 926 | 189 | 737 |
| | 35 | 5 | 30 |
| g | 3 | ..... | 3 |
| | 1 | ..... | 1 |
| | 2 | ..... | 2 |
| | 6 | ..... | 6 |
| | 21 | 4 | 17 |
| hysics | 2 | 1 | 1 |
| | 47 | 19 | 28 |
| | 1 | ..... | 1 |
| | 41 | 17 | 24 |
| | 1 | 1 | ..... |
| | 1 | ..... | 1 |
| | 3 | 1 | 2 |
| | 111 | 15 | 96 |
| | 5 | 1 | 4 |
| | 2 | ..... | 2 |
| ce | 4 | ..... | 4 |
| | 94 | 11 | 83 |
| | 1 | 1 | ..... |
| | 5 | 2 | 3 |
| | 125 | 25 | 100 |
| | 7 | ..... | 7 |
| | 1 | ..... | 1 |
| | 104 | 25 | 79 |
| nics | 2 | ..... | 2 |
| | 5 | ..... | 5 |
| | 6 | ..... | 6 |
| | 132 | 21 | 111 |
| | 4 | ..... | 4 |
| | 127 | 21 | 106 |
| | 1 | ..... | 1 |
| | 52 | 5 | 47 |
| | 6 | ..... | 6 |
| | 3 | 2 | 1 |
| | 1 | ..... | 1 |
| | 1 | ..... | 1 |
| | 1 | ..... | 1 |
| | 17 | 1 | 16 |
| | 1 | ..... | 1 |

| Area, field of science, and departmental title | Total | Master's departments | Doctorate departments |
|---|---|---|---|
| Engineering science | 13 | 2 | 11 |
| Fluid dynamics | 1 | ..... | 1 |
| Mechanical science | 0 | ..... | ..... |
| Mechanics | 5 | ..... | 5 |
| Mechanics and hydraulics | 1 | ..... | 1 |
| Theoretical and applied mechanics | 2 | ..... | 2 |
| Industrial, total | 88 | 28 | 60 |
| Administrative science | 2 | ..... | 2 |
| Engineering Management | 3 | 3 | ..... |
| Industrial communication engineering | 1 | ..... | 1 |
| Industrial engineering and management science | 4 | 1 | 3 |
| Industrial engineering and operations research | 3 | ..... | 3 |
| Industrial engineering | 39 | 10 | 29 |
| Industrial management | 3 | 1 | 2 |
| Management | 2 | ..... | 2 |
| Management engineering | 2 | 2 | ..... |
| Management science | 7 | 4 | 3 |
| Manufacturing engineering | 2 | 2 | ..... |
| Operations research | 9 | ..... | 9 |
| Systems engineering | 11 | 5 | 6 |
| Mechanical, total | 133 | 27 | 106 |
| Aerospace and mechanical engineering | 16 | ..... | 16 |
| Architectural engineering | 1 | 1 | ..... |
| Marine engineering and naval architecture | 1 | ..... | 1 |
| Mechanical and aeronautical engineering and material science | 4 | ..... | 4 |
| Mechanical and industrial engineering | 2 | 1 | 1 |
| Mechanical engineering and applied mechanics | 2 | ..... | 2 |
| Mechanical engineering | 102 | 23 | 79 |
| Naval architecture | 2 | ..... | 2 |
| Transportation | 2 | 1 | 1 |
| Welding engineering | 1 | 1 | ..... |
| Metallurgical, total | 62 | 6 | 56 |
| Ceramic engineering | 9 | 2 | 7 |
| Ceramics | 2 | ..... | 2 |
| Material science | 11 | 2 | 9 |
| Materials engineering | 11 | ..... | 11 |
| Metallurgical and materials engineering | 11 | ..... | 11 |
| Metallurgical engineering | 10 | 2 | 8 |
| Metallurgy | 7 | ..... | 7 |
| Solid state science and technology | 1 | ..... | 1 |
| Mining, total | 18 | 8 | 10 |
| Geological engineering | 2 | ..... | 2 |
| Mineral engineering | 4 | 3 | 1 |
| Mineral preparation | 1 | ..... | 1 |

**Table I-14—Con.**

| Area, field of science, and departmental title | Total | Master's departments | Doctorate departments |
|---|---|---|---|
| Mining | 2 | 1 | 1 |
| Mining engineering | 9 | 4 | 5 |
| Nuclear, total | 30 | 3 | 27 |
| Nuclear engineering | 25 | 2 | 23 |
| Nuclear science and engineering | 5 | 1 | 4 |
| Petroleum, total | 13 | 2 | 11 |
| Fuel technology | 2 | ..... | 2 |
| Petroleum and chemical engineering | 2 | ..... | 2 |
| Petroleum engineering | 9 | 2 | 7 |
| Engineering, n.e.c., total | 80 | 25 | 55 |
| Architecture | 10 | 9 | 1 |
| Bioengineering | 9 | ..... | 9 |
| Biomedical engineering | 17 | ..... | 17 |
| Biomedical engineering and Math | 1 | ..... | 1 |
| Clinical engineering | 1 | ..... | 1 |
| Economics of engineering | 1 | ..... | 1 |
| Energy engineering | 3 | ..... | 3 |
| Engineering | 22 | 6 | 16 |
| Engineering administration | 2 | 2 | ..... |
| Engineering design | 2 | 1 | 1 |
| Engineering graphics | 1 | 1 | ..... |
| Engineering mathematics | 1 | ..... | 1 |
| General engineering | 2 | 1 | 1 |
| Information engineering | 1 | ..... | 1 |
| Landscape Architecture | 1 | 1 | ..... |
| Polymer science and engineering | 1 | ..... | 1 |
| Sanitary engineering | 1 | 1 | ..... |
| Technology | 2 | 2 | ..... |
| Textile engineering | 2 | 1 | 1 |
| Physical sciences | 713 | 128 | 585 |
| Astronomy, total | 29 | 3 | 26 |
| Astronomy | 28 | 3 | 25 |
| Astrophysics | 1 | ..... | 1 |
| Atmospheric sciences, total | 25 | 2 | 23 |
| Astrogeophysics | 1 | ..... | 1 |
| Atmospheric and space sciences | 1 | ..... | 1 |
| Atmospheric sciences | 10 | ..... | 10 |
| Meteorology | 12 | 2 | 10 |
| Meteorology and oceanography | 1 | ..... | 1 |
| Chemistry, total | 224 | 27 | 197 |
| Chemistry | 217 | 26 | 191 |
| Crystallography | | | |
| Paper technology | | | |
| Physical chemistry | | | |
| Polymer science | | | |
| Geosciences, total | | | |
| Earth and planetary science | | | |
| Earth sciences | | | |
| Environmental sciences | | | |
| Geochemistry | | | |
| Geodetic science | | | |
| Geological science | | | |
| Geology | | | |
| Geology and geography | | | |
| Geology and geological engineering | | | |
| Geology and geophysics | | | |
| Geophysics | | | |
| Geosciences | | | |
| Hydrology | | | |
| Minerology | | | |
| Paleontology | | | |
| Petroleum geology | | | |
| Oceanography, total | | | |
| Marine biology | | | |
| Marine science | | | |
| Ocean engineering | | | |
| Oceanography | | | |
| Physical oceanography | | | |
| Physics, total | | | |
| Applied Physics | | | |
| Astronomy and space science | | | |
| Chemical physics | | | |
| Electronics | | | |
| Optical science | | | |
| Optics | | | |
| Physical sciences | | | |
| Physics | | | |
| Physics and astronomy | | | |
| Physics and astrophysics | | | |
| Physics and geophysics | | | |
| Physics and Mathematics | | | |
| Planetary and space science | | | |
| Solid state physics | | | |
| Space Science | | | |

| rtmental title | Total | Master's departments | Doctorate departments |
|---|---|---|---|
| | 2 | 1 | 1 |
| | 9 | 4 | 5 |
| | 30 | 3 | 27 |
| | 25 | 2 | 23 |
| | 5 | 1 | 4 |
| | 13 | 2 | 11 |
| | 2 | ..... | 2 |
| | 2 | ..... | 2 |
| | 9 | 2 | 7 |
| | 80 | 25 | 55 |
| | 10 | 9 | 1 |
| | 9 | ..... | 9 |
| | 17 | ..... | 17 |
| | 1 | ..... | 1 |
| | 1 | ..... | 1 |
| | 1 | ..... | 1 |
| | 3 | ..... | 3 |
| | 22 | 6 | 16 |
| | 2 | 2 | ..... |
| | 2 | 1 | 1 |
| | 1 | 1 | ..... |
| | 1 | ..... | 1 |
| | 2 | 1 | 1 |
| | 1 | ..... | 1 |
| | 1 | 1 | ..... |
| | 1 | ..... | 1 |
| | 1 | 1 | ..... |
| | 2 | 2 | ..... |
| | 2 | 1 | 1 |
| | 713 | 128 | 585 |
| | 29 | 3 | 26 |
| | 28 | 3 | 25 |
| | 1 | ..... | 1 |
| | 25 | 2 | 23 |
| | 1 | ..... | 1 |
| | 1 | ..... | 1 |
| | 10 | ..... | 10 |
| | 12 | 2 | 10 |
| | 1 | ..... | 1 |
| | 224 | 27 | 197 |
| | 217 | 26 | 191 |

| Area, field of science, and departmental title | Total | Master's departments | Doctorate departments |
|---|---|---|---|
| Crystallography | 1 | ..... | 1 |
| Paper technology | 2 | 1 | 1 |
| Physical chemistry | 1 | ..... | 1 |
| Polymer science | 3 | ..... | 3 |
| Geosciences, total | 179 | 53 | 126 |
| Earth and planetary science | 5 | 1 | 4 |
| Earth sciences | 18 | 8 | 10 |
| Environmental sciences | 9 | 5 | 4 |
| Geochemistry | 3 | ..... | 3 |
| Geodetic science | 1 | ..... | 1 |
| Geological science | 17 | 3 | 14 |
| Geology | 82 | 29 | 53 |
| Geology and geography | 7 | 2 | 5 |
| Geology and geological engineering | 2 | ..... | 2 |
| Geology and geophysics | 10 | 1 | 9 |
| Geophysics | 10 | 1 | 9 |
| Geosciences | 10 | 3 | 7 |
| Hydrology | 2 | ..... | 2 |
| Minerology | 1 | ..... | 1 |
| Paleontology | 1 | ..... | 1 |
| Petroleum geology | 1 | ..... | 1 |
| Oceanography, total | 34 | 3 | 31 |
| Marine biology | 1 | ..... | 1 |
| Marine science | 11 | 2 | 9 |
| Ocean engineering | 6 | 1 | 5 |
| Oceanography | 15 | ..... | 15 |
| Physical oceanography | 1 | ..... | 1 |
| Physics, total | 222 | 40 | 182 |
| Applied Physics | 5 | ..... | 5 |
| Astronomy and space science | 1 | ..... | 1 |
| Chemical physics | 5 | ..... | 5 |
| Electronics | 1 | ..... | 1 |
| Optical science | 1 | ..... | 1 |
| Optics | 1 | ..... | 1 |
| Physical sciences | 2 | 1 | 1 |
| Physics | 108 | 37 | 143 |
| Physics and astronomy | 20 | 2 | 18 |
| Physics and astrophysics | 1 | ..... | 1 |
| Physics and geophysics | 1 | ..... | 1 |
| Physics and Mathematics | 1 | ..... | 1 |
| Planetary and space science | 1 | ..... | 1 |
| Solid state physics | 1 | ..... | 1 |
| Space Science | 1 | ..... | 1 |

Table I-14—Con.

| Area, field of science, and departmental title | Total | Master's departments | Doctorate departments |
|---|---|---|---|
| Mathematical sciences | 339 | 83 | 256 |
| Applied mathematics, total | 74 | 19 | 55 |
| Applied mathematics | 7 | 1 | 6 |
| Applied mathematics and computer science | 1 | ..... | 1 |
| Computer science | 56 | 17 | 39 |
| Health computer science | 2 | ..... | 2 |
| Information Science | 8 | 1 | 7 |
| Mathematics, total | 219 | 61 | 158 |
| Mathematical science | 10 | 4 | 6 |
| Mathematics | 199 | 54 | 145 |
| Mathematics and applied mathematics | 1 | 1 | ..... |
| Mathematics and astronomy | 1 | 1 | ..... |
| Mathematics and statistics | 7 | 1 | 6 |
| Quantitative studies | 1 | ..... | 1 |
| Statistics, total | 46 | 3 | 43 |
| Applied statistics | 2 | 1 | 1 |
| Mathematical statistics | 1 | ..... | 1 |
| Statistics | 41 | 1 | 40 |
| Statistics and computer science | 2 | 1 | 1 |
| Life Sciences | 3,422 | 170 | 3,252 |
| Agriculture, total | 270 | 61 | 209 |
| Agricultural chemistry | 3 | ..... | 3 |
| Agricultural education | 1 | 1 | ..... |
| Agricultural Microbiology | 1 | ..... | 1 |
| Agricultural Science | 3 | 2 | 1 |
| Agronomy | 30 | 4 | 26 |
| Agronomy and genetics | 2 | ..... | 2 |
| Animal breeding | 2 | ..... | 2 |
| Animal diseases | 1 | ..... | 1 |
| Animal Husbandry | 2 | ..... | 2 |
| Animal industry | 4 | 2 | 2 |
| Animal nutrition | 2 | ..... | 2 |
| Animal science | 41 | 8 | 33 |
| Crop and soil science | 2 | 1 | 1 |
| Dairy husbandry | 1 | ..... | 1 |
| Dairy science | 16 | 5 | 11 |
| Farm crops | 3 | ..... | 3 |
| Floriculture | 1 | ..... | 1 |
| Forest Botany | 1 | ..... | 1 |
| Forest Chemistry | 1 | ..... | 1 |
| Forest entomology | 1 | ..... | 1 |
| Forest management | 3 | 1 | 2 |
| Forest products | 1 | ..... | 1 |
| Forest resources | 6 | 1 | 5 |
| Forestry | | | |
| Forestry and horticulture | | | |
| Horticulture | | | |
| International agriculture development | | | |
| Irrigation | | | |
| Natural resources | | | |
| Plant and soil science | | | |
| Plant breeding | | | |
| Plant science | | | |
| Poultry husbandry | | | |
| Poultry science | | | |
| Range management | | | |
| Range science | | | |
| Recreation and parks | | | |
| Resource development | | | |
| Resource sciences | | | |
| Silviculture | | | |
| Soil science | | | |
| Soils | | | |
| Soils and meteorology | | | |
| Vegetable crops | | | |
| Water resources | | | |
| Water resources administration | | | |
| Watershed management | | | |
| Wildlife | | | |
| Wildlife management | | | |
| Anatomy, total | | | |
| Anatomy | | | |
| Anatomy and cell biology | | | |
| Human anatomy | | | |
| Biochemistry, total | | | |
| Agricultural biochemistry | | | |
| Agricultural biochemistry/nutrition | | | |
| Biochemical science | | | |
| Biochemistry | | | |
| Biochemistry/biophysics | | | |
| Biochemistry/molecular biology | | | |
| Biochemistry/nutrition | | | |
| Biochemistry/pharmacology | | | |
| Biological chemistry | | | |
| Comparative biochemistry | | | |
| Lipid research | | | |
| Physiological chemistry | | | |
| Biology, total | | | |
| Behavioral biology | | | |
| Biology | | | |

| ental title | Total | Master's departments | Doctorate departments |
|---|---|---|---|
| | 339 | 83 | 256 |
| | 74 | 19 | 55 |
| | 7 | 1 | 6 |
| ence | 1 | ..... | 1 |
| | 56 | 17 | 39 |
| | 2 | ..... | 2 |
| | 8 | 1 | 7 |
| | 219 | 61 | 158 |
| | 10 | 4 | 6 |
| | 199 | 54 | 145 |
| | 1 | 1 | ..... |
| | 1 | 1 | ..... |
| | 7 | 1 | 6 |
| | 1 | ..... | 1 |
| | 46 | 3 | 43 |
| | 2 | 1 | 1 |
| | 1 | ..... | 1 |
| | 41 | 1 | 40 |
| | 2 | 1 | 1 |
| | 3,422 | 170 | 3,252 |
| | 270 | 61 | 209 |
| | 3 | ..... | 3 |
| | 1 | 1 | ..... |
| | 1 | ..... | 1 |
| | 3 | 2 | 1 |
| | 30 | 4 | 26 |
| | 2 | ..... | 2 |
| | 2 | ..... | 2 |
| | 1 | ..... | 1 |
| | 2 | ..... | 2 |
| | 4 | 2 | 2 |
| | 2 | ..... | 2 |
| | 41 | 8 | 33 |
| | 2 | 1 | 1 |
| | 1 | ..... | 1 |
| | 16 | 5 | 11 |
| | 3 | ..... | 3 |
| | 1 | ..... | 1 |
| | 1 | ..... | 1 |
| | 1 | ..... | 1 |
| | 1 | ..... | 1 |
| | 3 | 1 | 2 |
| | 1 | ..... | 1 |
| | 6 | 1 | 5 |

| Area, field of science, and departmental title | Total | Master's departments | Doctorate departments |
|---|---|---|---|
| Forestry | 25 | 7 | 18 |
| Forestry and horticulture | 1 | ..... | 1 |
| Horticulture | 31 | 9 | 22 |
| International agriculture development | 1 | 1 | ..... |
| Irrigation | 1 | 1 | ..... |
| Natural resources | 5 | 2 | 3 |
| Plant and soil science | 8 | 1 | 7 |
| Plant breeding | 1 | ..... | 1 |
| Plant science | 10 | 1 | 9 |
| Poultry husbandry | 1 | ..... | 1 |
| Poultry science | 15 | 5 | 10 |
| Range management | 4 | 1 | 3 |
| Range science | 3 | ..... | 3 |
| Recreation and parks | 3 | 1 | 2 |
| Resource development | 2 | 1 | 1 |
| Resource sciences | 2 | 1 | 1 |
| Silviculture | 1 | ..... | 1 |
| Soil science | 8 | ..... | 8 |
| Soils | 3 | ..... | 3 |
| Soils and meteorology | 1 | ..... | 1 |
| Vegetable crops | 3 | 1 | 2 |
| Water resources | 4 | 1 | 3 |
| Water resources administration | 2 | ..... | 2 |
| Watershed management | 1 | ..... | 1 |
| Wildlife | 3 | 1 | 2 |
| Wildlife management | 3 | 2 | 1 |
| Anatomy, total | 96 | 2 | 94 |
| Anatomy | 94 | 2 | 92 |
| Anatomy and cell biology | 1 | ..... | 1 |
| Human anatomy | 1 | ..... | 1 |
| Biochemistry, total | 151 | 3 | 148 |
| Agricultural biochemistry | 2 | ..... | 2 |
| Agricultural biochemistry/nutrition | 1 | ..... | 1 |
| Biochemical science | 1 | ..... | 1 |
| Biochemistry | 114 | 3 | 111 |
| Biochemistry/biophysics | 8 | ..... | 8 |
| Biochemistry/molecular biology | 3 | ..... | 3 |
| Biochemistry/nutrition | 5 | ..... | 5 |
| Biochemistry/pharmacology | 1 | ..... | 1 |
| Biological chemistry | 11 | ..... | 11 |
| Comparative biochemistry | 1 | ..... | 1 |
| Lipid research | 1 | ..... | 1 |
| Physiological chemistry | 3 | ..... | 3 |
| Biology, total | 127 | 28 | 99 |
| Behavioral biology | 1 | ..... | 1 |
| Biology | 117 | 28 | 89 |

Table I-14—Con.

| Area, field of science, and departmental title | Total | Master's departments | Doctorate departments |
|---|---|---|---|
| Developmental biology | 4 | ..... | 4 |
| Environmental biology | 1 | ..... | 1 |
| Evolutionary biology | 1 | ..... | 1 |
| Experimental biology | 1 | ..... | 1 |
| Population biology | 2 | ..... | 2 |
| Biometry and biostatistics, total | 23 | 1 | 22 |
| Biomathematics | 4 | ..... | 4 |
| Biometry | 11 | ..... | 11 |
| Biostatistics | 8 | 1 | 7 |
| Biophysics, total | 38 | 1 | 37 |
| Biophysical sciences | 1 | ..... | 1 |
| Biophysics | 17 | ..... | 17 |
| Biophysics and physical biochemistry | 1 | ..... | 1 |
| Biophysics/human genetics | 1 | ..... | 1 |
| Biophysics/microbiology | 1 | ..... | 1 |
| Cell biophysics | 1 | ..... | 1 |
| Engineering biophysics | 1 | ..... | 1 |
| Medical physics | 2 | ..... | 2 |
| Molecular biophysics | 2 | ..... | 2 |
| Molecular biophysics and biochemistry | 1 | ..... | 1 |
| Radiation biology | 5 | 1 | 4 |
| Radiation biology and biophysics | 2 | ..... | 2 |
| Radiation biophysics | 1 | ..... | 1 |
| Radiobiology | 1 | ..... | 1 |
| Radiological physics | 1 | ..... | 1 |
| Biosciences, n.e.c., total | 56 | 11 | 45 |
| Biological sciences | 37 | 7 | 30 |
| Biomedical science | 4 | ..... | 4 |
| Comparative medicine | 1 | ..... | 1 |
| General science | 2 | ..... | 2 |
| Health sciences | 3 | 1 | 2 |
| Laboratory | 1 | ..... | 1 |
| Life science | 7 | 2 | 5 |
| Natural science | 1 | 1 | ..... |
| Botany, total | 91 | 5 | 86 |
| Botanical science | 1 | ..... | 1 |
| Botany | 47 | 3 | 44 |
| Botany and microbiology | 4 | 1 | 3 |
| Botany and plant pathology | 8 | 1 | 7 |
| Plant pathology | 26 | ..... | 26 |
| Plant physiology | 5 | ..... | 5 |
| Cell biology, total | 25 | ..... | 25 |
| Biological structure | 2 | ..... | 2 |
| Cellular biology | | | |
| Molecular biology | | | |
| Ecology, total | | | |
| Ecology | | | |
| Human ecology | | | |
| Entomology and parisitology, total | | | |
| Entomology | | | |
| Entomology/parisitology | | | |
| Parisitology | | | |
| Genetics, total | | | |
| Genetics | | | |
| Human genetics | | | |
| Medical genetics | | | |
| Microbiology, total | | | |
| Bacteriology | | | |
| Bacteriology and public health | | | |
| Immunology | | | |
| Medical microbiology | | | |
| Medical microbiology/immunology | | | |
| Microbiology | | | |
| Microbiology/medical genetics | | | |
| Virology | | | |
| Virology and epidemiology | | | |
| Nutrition, total | | | |
| Food and nutrition | | | |
| Food economics | | | |
| Food science | | | |
| Food science/technology | | | |
| Food technology | | | |
| Foods | | | |
| Home economics | | | |
| Nutrition | | | |
| Pathology, total | | | |
| Anatomical pathology | | | |
| Clinical pathology | | | |
| Clinical pathology/laboratory medicine | | | |
| Medical pathology | | | |
| Oncology | | | |
| Pathobiology | | | |
| Pathology | | | |
| Radiation oncology | | | |

| tmental title | Total | Master's departments | Doctorate departments |
|---|---|---|---|
| | 4 | ..... | 4 |
| | 1 | ..... | 1 |
| | 1 | ..... | 1 |
| | 1 | ..... | 1 |
| | 2 | ..... | 2 |
| | 23 | 1 | 22 |
| | 4 | ..... | 4 |
| | 11 | ..... | 11 |
| | 8 | 1 | 7 |
| | 38 | 1 | 37 |
| | 1 | ..... | 1 |
| | 17 | ..... | 17 |
| | 1 | ..... | 1 |
| | 1 | ..... | 1 |
| | 1 | ..... | 1 |
| | 1 | ..... | 1 |
| | 1 | ..... | 1 |
| | 2 | ..... | 2 |
| | 2 | ..... | 2 |
| | 1 | ..... | 1 |
| | 5 | 1 | 4 |
| | 2 | ..... | 2 |
| | 1 | ..... | 1 |
| | 1 | ..... | 1 |
| | 1 | ..... | 1 |
| | 56 | 11 | 45 |
| | 37 | 7 | 30 |
| | 4 | ..... | 4 |
| | 1 | ..... | 1 |
| | 2 | ..... | 2 |
| | 3 | 1 | 2 |
| | 1 | ..... | 1 |
| | 7 | 2 | 5 |
| | 1 | 1 | ..... |
| | 91 | 5 | 86 |
| | 1 | ..... | 1 |
| | 47 | 3 | 44 |
| | 4 | 1 | 3 |
| | 8 | 1 | 7 |
| | 26 | ..... | 26 |
| | 5 | ..... | 5 |
| | 25 | ..... | 25 |
| | 2 | ..... | 2 |

| Area, field of science, and departmental title | Total | Master's departments | Doctorate departments |
|---|---|---|---|
| Cellular biology | 11 | ..... | 11 |
| Molecular biology | 12 | ..... | 12 |
| Ecology, total | 11 | ..... | 11 |
| Ecology | 10 | ..... | 10 |
| Human ecology | 1 | ..... | 1 |
| Entomology and parisitology, total | 42 | 2 | 40 |
| Entomology | 35 | 2 | 33 |
| Entomology/parisitology | 2 | ..... | 2 |
| Parisitology | 5 | ..... | 5 |
| Genetics, total | 49 | ..... | 49 |
| Genetics | 39 | ..... | 39 |
| Human genetics | 7 | ..... | 7 |
| Medical genetics | 3 | ..... | 3 |
| Microbiology, total | 162 | 7 | 155 |
| Bacteriology | 6 | ..... | 6 |
| Bacteriology and public health | 1 | ..... | 1 |
| Immunology | 8 | ..... | 8 |
| Medical microbiology | 9 | 1 | 8 |
| Medical microbiology/immunology | 5 | ..... | 5 |
| Microbiology | 130 | 6 | 124 |
| Microbiology/medical genetics | 1 | ..... | 1 |
| Virology | 1 | ..... | 1 |
| Virology and epidemiology | 1 | ..... | 1 |
| Nutrition, total | 61 | 12 | 49 |
| Food and nutrition | 14 | 2 | 12 |
| Food economics | 1 | 1 | ..... |
| Food science | 16 | 3 | 13 |
| Food science/technology | 6 | 1 | 5 |
| Food technology | 2 | 1 | 1 |
| Foods | 1 | ..... | 1 |
| Home economics | 1 | 1 | ..... |
| Nutrition | 20 | 3 | 17 |
| Pathology, total | 122 | 2 | 120 |
| Anatomical pathology | 1 | ..... | 1 |
| Clinical pathology | 7 | ..... | 7 |
| Clinical pathology/laboratory medicine | 1 | ..... | 1 |
| Medical pathology | 1 | ..... | 1 |
| Oncology | 6 | ..... | 6 |
| Pathobiology | 1 | ..... | 1 |
| Pathology | 104 | 2 | 102 |
| Radiation oncology | 1 | ..... | 1 |

Table I-14—Con.

| Area, field of science, and departmental title | Total | Master's departments | Doctorate departments |
|---|---|---|---|
| Pharmacology, total | 117 | ..... | 117 |
| Biochemical pharmacology | 2 | ..... | 2 |
| Medicinal chemistry | 9 | ..... | 9 |
| Pharmacognosy | 3 | ..... | 3 |
| Pharmacology | 93 | ..... | 93 |
| Pharmacology/therapeutics | 1 | ..... | 1 |
| Pharmacology/toxicology | 6 | ..... | 6 |
| Psychopharmacology | 1 | ..... | 1 |
| Toxicology | 2 | ..... | 2 |
| Physiology, total | 128 | 1 | 127 |
| Animal physiology | 2 | ..... | 2 |
| Exocrine physiology | 1 | ..... | 1 |
| Human physiology | 1 | ..... | 1 |
| Neurophysiology | 1 | ..... | 1 |
| Physiological optics | 1 | ..... | 1 |
| Physiological science | 1 | ..... | 1 |
| Physiology | 84 | 1 | 83 |
| Physiology and anatomy | 3 | ..... | 3 |
| Physiology and biophysics | 23 | ..... | 23 |
| Physiology/Pharmacology | 10 | ..... | 10 |
| Physiology, pharmacology, and biophysics | 1 | ..... | 1 |
| Zoology, total | 65 | 3 | 62 |
| Fish and wildlife | 3 | ..... | 3 |
| Fisheries | 1 | ..... | 1 |
| Forest zoology | 1 | ..... | 1 |
| Ornithology | 1 | 1 | ..... |
| Wildlife biology | 1 | 1 | ..... |
| Zoology | 53 | 1 | 52 |
| Zoology and entomology | 3 | ..... | 3 |
| Zoology and physiology | 2 | ..... | 2 |
| Other health sciences, incl. clinical, total | 1,788 | 31 | 1,757 |
| Administration | 1 | ..... | 1 |
| Administrative medicine | 1 | ..... | 1 |
| Allergy | 1 | ..... | 1 |
| Allergy and immunology | 1 | ..... | 1 |
| Allied health sciences | 1 | ..... | 1 |
| Ambulatory medicine | 1 | ..... | 1 |
| Anesthesiology | 85 | 3 | 82 |
| Arthritis | 3 | ..... | 3 |
| Biopsychology | 1 | ..... | 1 |
| Brain research | 1 | ..... | 1 |
| Cardiology | 70 | ..... | 70 |
| Cardiology | 1 | ..... | 1 |
| Cardiopulmonary/biophysics | 1 | ..... | 1 |
| Cardiorespiratory/pulmonary | 1 | ..... | 1 |
| Cardiovascular medicine | 11 | ..... | 11 |
| Cardiovascular surgery | | | |
| Chest diseases | | | |
| Child studies | | | |
| Clinical laboratory science | | | |
| Clinical medicine | | | |
| Clinical pharmacology | | | |
| Community and environmental medicine | | | |
| Community and preventive medicine | | | |
| Community and public health | | | |
| Community medicine | | | |
| Connective tissue disease | | | |
| Dentistry | | | |
| Dental hygiene - Pedodontics | | | |
| Dermatology | | | |
| Diagnostic radiology | | | |
| Emergency medicine | | | |
| Endocrinology | | | |
| Endocrinology and metabolism | | | |
| Environmental health | | | |
| Environmental medicine | | | |
| Epidemiology | | | |
| Epidemiology and environmental health | | | |
| Experimental endocrinology | | | |
| Experimental medicine | | | |
| Family and community medicine | | | |
| Family practice | | | |
| Gastroenterology | | | |
| General practice | | | |
| Gynecology | | | |
| Health services | | | |
| Hematology | | | |
| Hematology and oncology | | | |
| Histology | | | |
| Hospital and health administration | | | |
| Human reproduction | | | |
| Hypertension | | | |
| Infectious diseases | | | |
| Internal medicine | | | |
| International health | | | |
| Laboratory animal medicine | | | |
| Maternal and child health | | | |
| Medical and education administration | | | |
| Medical and public affairs | | | |
| Medical research | | | |
| Medical sciences | | | |
| Medical technology | | | |
| Medicine | | | |
| Metabolism | | | |
| Metabolism, endocrinology, and diabetes | | | |
| Myocardial biology | | | |

| ntal title | Total | Master's departments | Doctorate departments |
|---|---|---|---|
| | 117 | ..... | 117 |
| | 2 | ..... | 2 |
| | 9 | ..... | 9 |
| | 3 | ..... | 3 |
| | 93 | ..... | 93 |
| | 1 | ..... | 1 |
| | 6 | ..... | 6 |
| | 1 | ..... | 1 |
| | 2 | ..... | 2 |
| | 128 | 1 | 127 |
| | 2 | ..... | 2 |
| | 1 | ..... | 1 |
| | 1 | ..... | 1 |
| | 1 | ..... | 1 |
| | 1 | ..... | 1 |
| | 1 | ..... | 1 |
| | 84 | 1 | 83 |
| | 3 | ..... | 3 |
| | 23 | ..... | 23 |
| | 10 | ..... | 10 |
| | 1 | ..... | 1 |
| | 65 | 3 | 62 |
| | 3 | ..... | 3 |
| | 1 | ..... | 1 |
| | 1 | ..... | 1 |
| | 1 | 1 | ..... |
| | 1 | 1 | ..... |
| | 53 | 1 | 52 |
| | 3 | ..... | 3 |
| | 2 | ..... | 2 |
| | 1,788 | 31 | 1,757 |
| | 1 | ..... | 1 |
| | 1 | ..... | 1 |
| | 1 | ..... | 1 |
| | 1 | ..... | 1 |
| | 1 | ..... | 1 |
| | 1 | ..... | 1 |
| | 85 | 3 | 82 |
| | 3 | ..... | 3 |
| | 1 | ..... | 1 |
| | 1 | ..... | 1 |
| | 70 | ..... | 70 |
| | 1 | ..... | 1 |
| | 1 | ..... | 1 |
| | 1 | ..... | 1 |
| | 11 | ..... | 11 |

| Area, field of science, and departmental title | Total | Master's departments | Doctorate departments |
|---|---|---|---|
| Cardiovascular surgery | 1 | ..... | 1 |
| Chest diseases | 5 | ..... | 5 |
| Child studies | 2 | ..... | 2 |
| Clinical laboratory science | 3 | ..... | 3 |
| Clinical medicine | 1 | ..... | 1 |
| Clinical pharmacology | 20 | ..... | 20 |
| Community and environmental medicine | 3 | ..... | 3 |
| Community and preventive medicine | 10 | ..... | 10 |
| Community and public health | 2 | ..... | 2 |
| Community medicine | 24 | ..... | 24 |
| Connective tissue disease | 2 | ..... | 2 |
| Dentistry | 5 | 1 | 4 |
| Dental hygiene - Pedodontics | 1 | ..... | 1 |
| Dermatology | 41 | ..... | 41 |
| Diagnostic radiology | 6 | ..... | 6 |
| Emergency medicine | 1 | ..... | 1 |
| Endocrinology | 52 | ..... | 52 |
| Endocrinology and metabolism | 19 | ..... | 19 |
| Environmental health | 5 | ..... | 5 |
| Environmental medicine | 2 | ..... | 2 |
| Epidemiology | 5 | ..... | 5 |
| Epidemiology and environmental health | 1 | ..... | 1 |
| Experimental endocrinology | 2 | ..... | 2 |
| Experimental medicine | 5 | ..... | 5 |
| Family and community medicine | 8 | ..... | 8 |
| Family practice | 28 | ..... | 28 |
| Gastroenterology | 70 | ..... | 70 |
| General practice | 1 | ..... | 1 |
| Gynecology | 1 | ..... | 1 |
| Health services | 3 | ..... | 3 |
| Hematology | 72 | ..... | 72 |
| Hematology and oncology | 4 | ..... | 4 |
| Histology | 1 | ..... | 1 |
| Hospital and health administration | 2 | ..... | 2 |
| Human reproduction | 1 | ..... | 1 |
| Hypertension | 2 | ..... | 2 |
| Infectious diseases | 15 | ..... | 15 |
| Internal medicine | 14 | ..... | 14 |
| International health | 1 | ..... | 1 |
| Laboratory animal medicine | 3 | ..... | 3 |
| Maternal and child health | 3 | ..... | 3 |
| Medical and education administration | 1 | ..... | 1 |
| Medical and public affairs | 1 | ..... | 1 |
| Medical research | 3 | ..... | 3 |
| Medical sciences | 3 | ..... | 3 |
| Medical technology | 1 | 1 | ..... |
| Medicine | 60 | ..... | 60 |
| Metabolism | 3 | ..... | 3 |
| Metabolism, endocrinology, and diabetes | 1 | ..... | 1 |
| Myocardial biology | 1 | ..... | 1 |

Table I-14—Con.

| Area, field of science, and departmental title | Total | Master's departments | Doctorate departments |
|---|---|---|---|
| Nephrology | 13 | ..... | 13 |
| Neurobiology | 3 | ..... | 3 |
| Neurological surgery | 16 | ..... | 16 |
| Neurology | 79 | ..... | 79 |
| Neurology/neuropathology | 1 | ..... | 1 |
| Neurosciences | 7 | ..... | 7 |
| Neurosurgery | 5 | ..... | 5 |
| Nuclear medicine | 4 | ..... | 4 |
| Nursing | 11 | 6 | 5 |
| Nursing education | 1 | ..... | 1 |
| Obstetrics | 1 | ..... | 1 |
| Obstetrics/gynecology | 91 | ..... | 91 |
| Occupational health | 1 | ..... | 1 |
| Ophthalmology | 86 | 1 | 85 |
| Oral biology | 2 | 1 | 1 |
| Oral pathology | 2 | ..... | 2 |
| Oral Surgery | 4 | ..... | 4 |
| Orthodontics | 2 | 1 | 1 |
| Orthopedic surgery | 28 | ..... | 28 |
| Orthopedic surgery and rehabilitation | 3 | ..... | 3 |
| Orthopedics | 9 | ..... | 9 |
| Otorhinolaryngology | 82 | ..... | 82 |
| Pediatric surgery | 1 | ..... | 1 |
| Pediatrics | 92 | ..... | 92 |
| Perinatal medicine | 1 | ..... | 1 |
| Pharmaceutical chemistry | 7 | ..... | 7 |
| Pharmaceutics | 10 | ..... | 10 |
| Pharmacy | 21 | 3 | 18 |
| Physical diagnosis | 1 | ..... | 1 |
| Physical medicine | 4 | ..... | 4 |
| Physical medicine and rehabilitation | 22 | ..... | 22 |
| Plastic surgery | 4 | ..... | 4 |
| Post graduate medicine | 1 | ..... | 1 |
| Preventive and social medicine | 4 | ..... | 4 |
| Preventive medicine | 11 | ..... | 11 |
| Preventive medicine and public health | 5 | ..... | 5 |
| Primary health care | 1 | ..... | 1 |
| Proctology | 1 | ..... | 1 |
| Psychiatry | 89 | ..... | 89 |
| Psychiatry and behavioral science | 2 | ..... | 2 |
| Psychiatry and neurology | 3 | ..... | 3 |
| Psychobiology | 1 | ..... | 1 |
| Public health | 6 | ..... | 6 |
| Public health and epidemiology | 3 | ..... | 3 |
| Pulmonary disease | 64 | ..... | 64 |
| Radiology | 81 | 1 | 80 |
| Rehabilitation medicine | 20 | ..... | 20 |
| Rheumatology | 5 | ..... | 5 |
| Small animal surgery | | | |
| Surgery | | | |
| Therapeutic radiology | | | |
| Tropical med/medical micro/parisitology | | | |
| Tropical medicine | | | |
| Urology | | | |
| Veterinary anatomy | | | |
| Veterinary bacteriology | | | |
| Veterinary medicine | | | |
| Veterinary parasitology | | | |
| Veterinary pathology | | | |
| Veterinary physiology | | | |
| Veterinary science | | | |
| Vivarial medicine | | | |
| Psychology, total | | | |
| Animal behavior | | | |
| Child development | | | |
| Child psychology | | | |
| Clinical psychology | | | |
| Educational psychology | | | |
| Experimental psychology | | | |
| Experimental social psychology | | | |
| Guidance | | | |
| Human development | | | |
| Medical psychology | | | |
| Mental health | | | |
| Physiological psychology | | | |
| Psychology | | | |
| Psychology and education | | | |
| Social psychology | | | |
| Social sciences | | | |
| Agricultural economics, total | | | |
| Agricultural economics | | | |
| Agricultural economics and sociology | | | |
| Agricultural economics and economics | | | |
| Anthropology, total | | | |
| Anthropology | | | |
| Archeology | | | |
| Economics, total | | | |
| Business economics | | | |
| Economics | | | |
| Economics and business administration | | | |

| mental title | Total | Master's departments | Doctorate departments |
|---|---|---|---|
| | 13 | | 13 |
| | 3 | | 3 |
| | 16 | | 16 |
| | 79 | | 79 |
| | 1 | | 1 |
| | 7 | | 7 |
| | 5 | | 5 |
| | 4 | | 4 |
| | 11 | 6 | 5 |
| | 1 | | 1 |
| | 1 | | 1 |
| | 91 | | 91 |
| | 1 | | 1 |
| | 86 | 1 | 85 |
| | 2 | 1 | 1 |
| | 2 | | 2 |
| | 4 | | 4 |
| | 2 | 1 | 1 |
| | 28 | | 28 |
| | 3 | | 3 |
| | 9 | | 9 |
| | 82 | | 82 |
| | 1 | | 1 |
| | 92 | | 92 |
| | 1 | | 1 |
| | 7 | | 7 |
| | 10 | | 10 |
| | 21 | 3 | 18 |
| | 1 | | 1 |
| | 4 | | 4 |
| | 22 | | 22 |
| | 4 | | 4 |
| | 1 | | 1 |
| | 4 | | 4 |
| | 11 | | 11 |
| | 5 | | 5 |
| | 1 | | 1 |
| | 1 | | 1 |
| | 89 | | 89 |
| | 2 | | 2 |
| | 3 | | 3 |
| | 1 | | 1 |
| | 6 | | 6 |
| | 3 | | 3 |
| | 64 | | 64 |
| | 81 | 1 | 80 |
| | 20 | | 20 |
| | 5 | | 5 |

| Area, field of science, and departmental title | Total | Master's departments | Doctorate departments |
|---|---|---|---|
| Small animal surgery | 1 | 1 | |
| Surgery | 91 | 1 | 90 |
| Therapeutic radiology | 10 | | 10 |
| Tropical med/medical micro/parisitology | 2 | | 2 |
| Tropical medicine | 1 | | 1 |
| Urology | 31 | 1 | 30 |
| Veterinary anatomy | 6 | 1 | 5 |
| Veterinary bacteriology | 1 | | 1 |
| Veterinary medicine | 7 | 3 | 4 |
| Veterinary parasitology | 3 | | 3 |
| Veterinary pathology | 6 | 1 | 5 |
| Veterinary physiology | 4 | 1 | 3 |
| Veterinary science | 12 | 4 | 8 |
| Vivarial medicine | 1 | | 1 |
| **Psychology, total** | **215** | **35** | **180** |
| Animal behavior | 1 | | 1 |
| Child development | 5 | 3 | 2 |
| Child psychology | 1 | | 1 |
| Clinical psychology | 4 | | 4 |
| Educational psychology | 3 | | 3 |
| Experimental psychology | 7 | 2 | 5 |
| Experimental social psychology | 1 | | 1 |
| Guidance | 1 | 1 | |
| Human development | 5 | 1 | 4 |
| Medical psychology | 2 | | 2 |
| Mental health | 1 | | 1 |
| Physiological psychology | 3 | | 3 |
| Psychology | 177 | 26 | 151 |
| Psychology and education | 1 | | 1 |
| Social psychology | 3 | 2 | 1 |
| **Social sciences** | **928** | **269** | **659** |
| **Agricultural economics, total** | **41** | **9** | **32** |
| Agricultural economics | 36 | 6 | 30 |
| Agricultural economics and sociology | 3 | 2 | 1 |
| Agricultural economics and economics | 2 | 1 | 1 |
| **Anthropology, total** | **93** | **24** | **69** |
| Anthropology | 92 | 23 | 69 |
| Archeology | 1 | 1 | |
| **Economics, total** | **160** | **41** | **119** |
| Business economics | 1 | | 1 |
| Economics | 150 | 40 | 110 |
| Economics and business administration | 2 | | 2 |

Table I-14—Con.

| Area, field of science, and departmental title | Total | Master's departments | Doctorate departments |
|---|---|---|---|
| Industrial relations | 1 | 1 | ..... |
| Managerial economics | 1 | ..... | 1 |
| Medical economics | 1 | ..... | 1 |
| Mineral economics | 2 | ..... | 2 |
| Political economy | 2 | ..... | 2 |
| Geography, total | 86 | 37 | 49 |
| Geography | 85 | 37 | 48 |
| Geography and anthropology | 1 | ..... | 1 |
| History and philosophy of science, total | 77 | 5 | 72 |
| History | 21 | 4 | 17 |
| History and philosophy of science | 5 | ..... | 5 |
| History of health sciences | 1 | ..... | 1 |
| History of Medicine | 4 | ..... | 4 |
| History of science | 9 | ..... | 9 |
| History of science and medicine | 1 | ..... | 1 |
| Logic and methodology of science | 1 | ..... | 1 |
| Philosophy | 29 | 1 | 28 |
| Philosophy of science | 6 | ..... | 6 |
| Linguistics, total | 74 | 13 | 61 |
| Biocommunications | 4 | ..... | 4 |
| Communications | 3 | 1 | 2 |
| Communications | 3 | ..... | 3 |
| Linguistics | 45 | 6 | 39 |
| Mass communication | 1 | 1 | ..... |
| Psycholinguistics | 1 | ..... | 1 |
| Sensory communication | 1 | ..... | 1 |
| Speech | 2 | 1 | 1 |
| Speech and hearing science | 4 | ..... | 4 |
| Speech pathology | 10 | 4 | 6 |
| Political science, total | 171 | 63 | 108 |
| African affairs | 1 | 1 | ..... |
| American studies | 1 | 1 | ..... |
| Government | 20 | 7 | 13 |
| Government and foreign affairs | 1 | ..... | 1 |
| International Affairs | 1 | ..... | 1 |
| International relations | 5 | 2 | 3 |
| International studies | 1 | 1 | ..... |
| Political science | 131 | 44 | 87 |
| Politics | 3 | 1 | 2 |
| Public administration | 5 | 4 | 1 |
| Public affairs | 2 | 2 | ..... |
| Sociology, total | | | |
| Asian studies | | | |
| City planning | | | |
| Community studies | | | |
| Demography | | | |
| Environmental studies | | | |
| Family life | | | |
| Folklore | | | |
| Interdisciplinary studies | | | |
| International service | | | |
| Labor and industrial relations | | | |
| Latin American studies | | | |
| Regional planning | | | |
| Regional science | | | |
| Rural sociology | | | |
| Social relations | | | |
| Social sciences | | | |
| Social studies | | | |
| Society | | | |
| Sociology | | | |
| Urban planning | | | |
| Urban studies | | | |
| Sociology and anthropology, total | | | |
| Sociology and anthropology | | | |
| Social sciences, n.e.c., total | | | |
| Behavioral sciences | | | |
| Biobehavioral sciences | | | |
| Human behavior | | | |
| Social work | | | |
| Socio-Medical sciences | | | |
| All other sciences, n.e.c., total | | | |
| Avian science | | | |
| Business administration | | | |
| Education | | | |
| Health education | | | |
| Humanities | | | |
| Legal medicine | | | |
| Library, medical | | | |
| Physical education | | | |
| Pomology | | | |
| Postgraduate medical education | | | |
| Science education | | | |

| ile | Total | Master's departments | Doctorate departments |
|---|---|---|---|
| ..... | 1 | 1 | ..... |
| ..... | 1 | ..... | 1 |
| ..... | 1 | ..... | 1 |
| ..... | 2 | ..... | 2 |
| ..... | 2 | ..... | 2 |
| ..... | 86 | 37 | 49 |
| ..... | 85 | 37 | 48 |
| ..... | 1 | ..... | 1 |
| ..... | 77 | 5 | 72 |
| ..... | 21 | 4 | 17 |
| ..... | 5 | ..... | 5 |
| ..... | 1 | ..... | 1 |
| ..... | 4 | ..... | 4 |
| ..... | 9 | ..... | 9 |
| ..... | 1 | ..... | 1 |
| ..... | 1 | ..... | 1 |
| ..... | 29 | 1 | 28 |
| ..... | 6 | ..... | 6 |
| ..... | 74 | 13 | 61 |
| ..... | 4 | ..... | 4 |
| ..... | 3 | 1 | 2 |
| ..... | 3 | ..... | 3 |
| ..... | 45 | 6 | 39 |
| ..... | 1 | 1 | ..... |
| ..... | 1 | ..... | 1 |
| ..... | 1 | ..... | 1 |
| ..... | 2 | 1 | 1 |
| ..... | 4 | ..... | 4 |
| ..... | 10 | 4 | 6 |
| ..... | 171 | 63 | 108 |
| ..... | 1 | 1 | ..... |
| ..... | 1 | 1 | ..... |
| ..... | 20 | 7 | 13 |
| ..... | 1 | ..... | 1 |
| ..... | 1 | ..... | 1 |
| ..... | 5 | 2 | 3 |
| ..... | 1 | 1 | ..... |
| ..... | 131 | 44 | 87 |
| ..... | 3 | 1 | 2 |
| ..... | 5 | 4 | 1 |
| ..... | 2 | 2 | ..... |

| Area, field of science, and departmental title | Total | Master's departments | Doctorate departments |
|---|---|---|---|
| Sociology, total | 191 | 64 | 127 |
| Asian studies | 2 | 2 | ..... |
| City planning | 1 | ..... | 1 |
| Community studies | 1 | ..... | 1 |
| Demography | 1 | 1 | ..... |
| Environmental studies | 2 | ..... | 2 |
| Family life | 5 | 3 | 2 |
| Folklore | 1 | ..... | 1 |
| Interdisciplinary studies | 1 | ..... | 1 |
| International service | 1 | ..... | 1 |
| Labor and industrial relations | 2 | 1 | 1 |
| Latin American studies | 3 | 3 | ..... |
| Regional planning | 5 | 2 | 3 |
| Regional science | 3 | 1 | 2 |
| Rural sociology | 2 | ..... | 2 |
| Social relations | 2 | 1 | 1 |
| Social sciences | 6 | ..... | 6 |
| Social studies | 2 | ..... | 2 |
| Society | 1 | 1 | ..... |
| Sociology | 132 | 39 | 93 |
| Urban planning | 9 | 4 | 5 |
| Urban studies | 9 | 6 | 3 |
| Sociology and anthropology, total | 23 | 13 | 10 |
| Sociology and anthropology | 23 | 13 | 10 |
| Social sciences, n.e.c., total | 12 | ..... | 12 |
| Behavioral sciences | 6 | ..... | 6 |
| Biobehavioral sciences | 1 | ..... | 1 |
| Human behavior | 2 | ..... | 2 |
| Social work | 1 | ..... | 1 |
| Socio-Medical sciences | 2 | ..... | 2 |
| All other sciences, n.e.c., total | 16 | 2 | 14 |
| Avian science | 1 | 1 | ..... |
| Business administration | 1 | 1 | ..... |
| Education | 1 | ..... | 1 |
| Health education | 2 | ..... | 2 |
| Humanities | 1 | ..... | 1 |
| Legal medicine | 2 | ..... | 2 |
| Library, medical | 1 | ..... | 1 |
| Physical education | 1 | ..... | 1 |
| Pomology | 1 | ..... | 1 |
| Postgraduate medical education | 2 | ..... | 2 |
| Science education | 3 | ..... | 3 |

Table I-15. List of top 100 institutions, including affiliated medical schools, ranked on basis of total graduate enrollment: 19

| Institution name | Graduate enrollment | | | |
|---|---|---|---|---|
| | Rank | Total | Full-time | Part-time |
| University of California, Berkeley | | 5,213 | 5,066 | 147 |
| Total | 1 | 5,213 | 5,066 | 147 |
| University of Illinois | | 3,799 | 3,518 | 281 |
| University of Illinois College of Medicine | | 585 | 486 | 99 |
| Total | 2 | 4,385 | 4,004 | 380 |
| University of Minnesota | | 3,339 | 2,843 | 496 |
| University of Minnesota, Minneapolis Medical School | | 594 | 560 | 34 |
| Total | 3 | 3,933 | 3,403 | 530 |
| University of Wisconsin | | 3,539 | 3,350 | 189 |
| University of Wisconsin Medical School | | 304 | 295 | 9 |
| Total | 4 | 3,843 | 3,645 | 198 |
| Rutgers, The State University | | 3,434 | 1,577 | 1,857 |
| Rutgers College of Medicine and Dentistry | | 92 | 91 | 1 |
| Total | 5 | 3,526 | 1,668 | 1,858 |
| Ohio State University | | 3,303 | 2,804 | 499 |
| Ohio State University College of Medicine | | 221 | 199 | 22 |
| Total | 6 | 3,524 | 3,003 | 521 |
| University of Michigan | | 3,051 | 2,903 | 148 |
| University of Michigan Medical School | | 296 | 288 | 8 |
| Total | 7 | 3,347 | 3,191 | 156 |
| Michigan State University | | 2,771 | 2,586 | 185 |
| Michigan State University College of Medicine | | 286 | 262 | 24 |
| Total | 8 | 3,057 | 2,848 | 209 |
| University of California, Los Angeles | | 2,839 | 2,666 | 173 |
| University of California, Los Angeles Medical School | | 213 | 205 | 8 |
| Total | 9 | 3,052 | 2,871 | 181 |
| Massachusetts Institute of Technology | | 3,012 | 3,010 | 2 |
| Total | 10 | 3,012 | 3,010 | 2 |
| Cumulative Total | | 36,891 | 32,709 | 4,182 |

| Institution name |
|---|
| University of Texas, Austin |
| University of Texas, Houston Medical School |
| University of Texas, Southwestern Medical School |
| University of Texas, Galveston Medical School |
| University of Texas, San Antonio Medical School |
| Total |
| Stanford University |
| Stanford University School of Medicine |
| Total |
| Pennsylvania State University |
| Pennsylvania State University College of Medicine |
| Total |
| University of Maryland |
| University of Maryland School of Medicine |
| Total |
| Purdue University |
| Total |
| Northeastern University |
| Total |
| Cornell University |
| Cornell University Medical School |
| Total |
| University of Southern California |
| University of Southern California Medical School |
| Total |
| Columbia University |
| Columbia University College of Physicians and Surgeons |
| Total |
| Polytechnic Institute of Brooklyn |
| Total |
| Cumulative Total |

**-15. List of top 100 institutions, including affiliated medical schools, ranked on basis of total graduate enrollment: 1973**

| | Graduate enrollment | | |
|---|---|---|---|
| Rank | Total | Full-time | Part-time |
| * | 5,213 | 5,066 | 147 |
| 1 | 5,213 | 5,066 | 147 |
| | 3,799 | 3,518 | 281 |
| | 585 | 486 | 99 |
| 2 | 4,385 | 4,004 | 380 |
| | 3,339 | 2,843 | 496 |
| | 594 | 560 | 34 |
| 3 | 3,933 | 3,403 | 530 |
| | 3,539 | 3,350 | 189 |
| | 304 | 295 | 9 |
| 4 | 3,843 | 3,645 | 198 |
| | 3,434 | 1,577 | 1,857 |
| y | 92 | 91 | 1 |
| 5 | 3,526 | 1,668 | 1,858 |
| | 3,303 | 2,804 | 499 |
| e | 221 | 199 | 22 |
| 6 | 3,524 | 3,003 | 521 |
| | 3,051 | 2,903 | 148 |
| | 296 | 288 | 8 |
| 7 | 3,347 | 3,191 | 156 |
| | 2,771 | 2,586 | 185 |
| icine | 286 | 262 | 24 |
| 8 | 3,057 | 2,848 | 209 |
| | 2,839 | 2,666 | 173 |
| | 213 | 205 | 8 |
| 9 | 3,052 | 2,871 | 181 |
| | 3,012 | 3,010 | 2 |
| 10 | 3,012 | 3,010 | 2 |
| | 36,891 | 32,709 | 4,182 |

| Institution name | Graduate enrollment | | | |
|---|---|---|---|---|
| | Rank | Total | Full-time | Part-time |
| University of Texas, Austin | | 2,624 | 2,406 | 218 |
| University of Texas, Houston Medical School | | 144 | 144 | 0 |
| University of Texas, Southwestern Medical School | | 91 | 80 | 11 |
| University of Texas, Galveston Medical School | | 67 | 57 | 10 |
| University of Texas, San Antonio Medical School | | 50 | 46 | 4 |
| Total | 11 | 2,976 | 2,733 | 243 |
| Stanford University | | 2,871 | 2,636 | 235 |
| Stanford University School of Medicine | | 99 | 97 | 2 |
| Total | 12 | 2,970 | 2,733 | 237 |
| Pennsylvania State University | | 2,885 | 2,162 | 723 |
| Pennsylvania State University College of Medicine | | 71 | 71 | 0 |
| Total | 13 | 2,956 | 2,233 | 723 |
| University of Maryland | | 2,867 | 1,620 | 1,247 |
| University of Maryland School of Medicine | | 85 | 85 | 0 |
| Total | 14 | 2,952 | 1,705 | 1,247 |
| Purdue University | | 2,888 | 2,694 | 194 |
| Total | 15 | 2,888 | 2,694 | 194 |
| Northeastern University | | 2,851 | 876 | 1,975 |
| Total | 16 | 2,851 | 876 | 1,975 |
| Cornell University | | 2,574 | 2,557 | 17 |
| Cornell University Medical School | | 77 | 76 | 1 |
| Total | 17 | 2,651 | 2,633 | 18 |
| University of Southern California | | 2,277 | 1,405 | 872 |
| University of Southern California Medical School | | 132 | 113 | 19 |
| Total | 18 | 2,409 | 1,518 | 891 |
| Columbia University | | 2,041 | 1,593 | 448 |
| Columbia University College of Physicians and Surgeons | | 365 | 282 | 83 |
| Total | 19 | 2,406 | 1,875 | 531 |
| Polytechnic Institute of Brooklyn | | 2,347 | 409 | 1,938 |
| Total | 20 | 2,347 | 409 | 1,938 |
| Cumulative Total | | 64,297 | 52,118 | 12,179 |

Table I-15.—Con.

| Institution name | Rank | Graduate enrollment Total | Full-time | Part-time |
|---|---|---|---|---|
| University of Washington | | 2,052 | 1,680 | 372 |
| University of Washington School of Medicine | | 242 | 238 | 4 |
| Total | 21 | 2,294 | 1,918 | 376 |
| University of Oklahoma | | 2,144 | 963 | 1,181 |
| University of Oklahoma College of Medicine | | 137 | 119 | 18 |
| Total | 22 | 2,281 | 1,082 | 1,199 |
| Texas A&M University | | 2,161 | 1,790 | 371 |
| Total | 23 | 2,161 | 1,790 | 371 |
| University of Tennessee | | 2,007 | 1,395 | 612 |
| University of Tennessee College of Medicine | | 126 | 102 | 24 |
| Total | 24 | 2,133 | 1,497 | 636 |
| University of Florida | | 1,999 | 1,691 | 308 |
| University of Florida College of Medicine | | 88 | 79 | 9 |
| Total | 25 | 2,087 | 1,770 | 317 |
| City University of New York Graduate Division | | 2,002 | 1,430 | 572 |
| Mount Sinai School of Medicine, City University of New York | | 56 | 51 | 5 |
| Total | 26 | 2,058 | 1,481 | 577 |
| University of Arizona | | 1,965 | 1,707 | 258 |
| University of Arizona College of Medicine | | 82 | 79 | 3 |
| Total | 27 | 2,047 | 1,786 | 261 |
| Indiana University | | 1,604 | 1,355 | 249 |
| Indiana University School of Medicine | | 288 | 254 | 34 |
| Total | 28 | 1,892 | 1,609 | 283 |
| New School for Social Research | | 1,883 | 523 | 1,360 |
| Total | 29 | 1,883 | 523 | 1,360 |
| Iowa State University | | 1,878 | 1,622 | 256 |
| Total | 30 | 1,878 | 1,622 | 256 |
| Cumulative Total | | 85,011 | 67,196 | 17,815 |

| Institution name | Rank |
|---|---|
| Wayne State University | |
| Wayne State University School of Medicine | |
| Total | 31 |
| University of California, Davis | |
| University of California, Davis Medical School | |
| Total | 32 |
| University of Colorado | |
| University of Colorado School of Medicine | |
| Total | 33 |
| University of Connecticut | |
| University of Connecticut School of Medicine | |
| Total | 34 |
| University of Pittsburgh | |
| University of Pittsburgh School of Medicine | |
| Total | 35 |
| University of Massachusetts | |
| University of Massachusetts Medical School | |
| Total | 36 |
| State University of New York at Buffalo | |
| State University of New York at Buffalo, School of Medicine | |
| Total | 37 |
| New York University | |
| New York University School of Medicine | |
| Total | 38 |
| Syracuse University | |
| Total | 39 |
| University of Pennsylvania | |
| University of Pennsylvania School of Medicine | |
| Total | 40 |
| Cumulative Total | |

| | Graduate enrollment | | |
|---|---|---|---|
| Rank | Total | Full-time | Part-time |
| | 2,052 | 1,680 | 372 |
| | 242 | 238 | 4 |
| 21 | 2,294 | 1,918 | 376 |
| | 2,144 | 963 | 1,181 |
| | 137 | 119 | 18 |
| 22 | 2,281 | 1,082 | 1,199 |
| | 2,161 | 1,790 | 371 |
| 23 | 2,161 | 1,790 | 371 |
| | 2,007 | 1,395 | 612 |
| | 126 | 102 | 24 |
| 24 | 2,133 | 1,497 | 636 |
| | 1,999 | 1,691 | 308 |
| | 88 | 79 | 9 |
| 25 | 2,087 | 1,770 | 317 |
| | 2,002 | 1,430 | 572 |
| | 56 | 51 | 5 |
| 26 | 2,058 | 1,481 | 577 |
| | 1,965 | 1,707 | 258 |
| | 82 | 79 | 3 |
| 27 | 2,047 | 1,786 | 261 |
| | 1,604 | 1,355 | 249 |
| | 288 | 254 | 34 |
| 28 | 1,892 | 1,609 | 283 |
| | 1,883 | 523 | 1,360 |
| 29 | 1,883 | 523 | 1,360 |
| | 1,878 | 1,622 | 256 |
| 30 | 1,878 | 1,622 | 256 |
| | 85,011 | 67,196 | 17,815 |

| Institution name | Rank | Graduate enrollment Total | Full-time | Part-time |
|---|---|---|---|---|
| Wayne State University | | 1,658 | 906 | 752 |
| Wayne State University School of Medicine | | 197 | 157 | 40 |
| Total | 31 | 1,855 | 1,063 | 792 |
| University of California, Davis | | 1,823 | 1,720 | 103 |
| University of California, Davis Medical School | | 25 | 25 | 0 |
| Total | 32 | 1,848 | 1,745 | 103 |
| University of Colorado | | 1,661 | 1,477 | 184 |
| University of Colorado School of Medicine | | 179 | 170 | 9 |
| Total | 33 | 1,840 | 1,647 | 193 |
| University of Connecticut | | 1,650 | 1,323 | 327 |
| University of Connecticut School of Medicine | | 28 | 28 | 0 |
| Total | 34 | 1,678 | 1,351 | 327 |
| University of Pittsburgh | | 1,607 | 966 | 641 |
| University of Pittsburgh School of Medicine | | 70 | 68 | 2 |
| Total | 35 | 1,677 | 1,034 | 643 |
| University of Massachusetts | | 1,648 | 1,488 | 160 |
| University of Massachusetts Medical School | | 0 | 0 | 0 |
| Total | 36 | 1,648 | 1,488 | 160 |
| State University of New York at Buffalo | | 1,445 | 1,075 | 370 |
| State University of New York at Buffalo, School of Medicine | | 202 | 171 | 31 |
| Total | 37 | 1,647 | 1,246 | 401 |
| New York University | | 1,488 | 490 | 998 |
| New York University School of Medicine | | 156 | 104 | 52 |
| Total | 38 | 1,644 | 594 | 1,050 |
| Syracuse University | | 1,642 | 984 | 658 |
| Total | 39 | 1,642 | 984 | 658 |
| University of Pennsylvania | | 1,421 | 1,167 | 254 |
| University of Pennsylvania School of Medicine | | 162 | 150 | 12 |
| Total | 40 | 1,583 | 1,317 | 266 |
| Cumulative Total | | 102,073 | 79,665 | 22,408 |

**Table I-15.—Con.**

| Institution name | Graduate enrollment | | | |
|---|---|---|---|---|
| | Rank | Total | Full-time | Part-time |
| University of Kansas | | 1,502 | 1,239 | 263 |
| University of Kansas School of Medicine | | 65 | 64 | 1 |
| Total | 41 | 1,567 | 1,303 | 264 |
| George Washington University | | 1,366 | 376 | 990 |
| George Washington University Medical School | | 182 | 134 | 48 |
| Total | 42 | 1,548 | 510 | 1,038 |
| North Carolina State University, Raleigh | | 1,531 | 1,232 | 299 |
| Total | 43 | 1,531 | 1,232 | 299 |
| Virginia Polytechnic Institute | | 1,524 | 1,055 | 469 |
| Total | 44 | 1,524 | 1,055 | 469 |
| Harvard University | | 1,331 | 1,327 | 4 |
| Harvard University Medical School | | 158 | 158 | 0 |
| Total | 45 | 1,489 | 1,485 | 4 |
| University of Hawaii | | 1,360 | 1,249 | 111 |
| University of Hawaii School of Medicine | | 122 | 113 | 9 |
| Total | 46 | 1,482 | 1,362 | 120 |
| State University of New York, Stony Brook | | 1,402 | 1,047 | 355 |
| State University of New York, Stony Brook School of Medicine | | 53 | 49 | 4 |
| Total | 47 | 1,455 | 1,096 | 359 |
| University of Missouri, Columbia | | 1,368 | 1,053 | 315 |
| University of Missouri, Columbia School of Medicine | | 85 | 80 | 5 |
| Total | 48 | 1,453 | 1,133 | 320 |
| University of Chicago | | 1,208 | 1,138 | 70 |
| University of Chicago Pritzker School of Medicine | | 245 | 238 | 7 |
| Total | 49 | 1,453 | 1,376 | 77 |
| University of Iowa | | 1,177 | 958 | 219 |
| University of Iowa College of Medicine | | 274 | 263 | 11 |
| Total | 50 | 1,451 | 1,221 | 230 |
| Cumulative Total | | 117,026 | 91,438 | 25,588 |

| Institution name |
|---|
| Arizona State University |
| Total |
| University of Cincinnati |
| University of Cincinnati College of Medicine |
| Total |
| Colorado State University |
| Total |
| Oregon State University |
| Total |
| Yale University |
| Yale University Medical School |
| Total |
| University of North Carolina, Chapel Hill |
| University of North Carolina Medical School, Chapel Hill |
| Total |
| Temple University |
| Temple University School of Medicine |
| Total |
| Columbia University Teachers College |
| Total |
| University of Georgia |
| Total |
| Washington State University |
| Total |
| Cumulative Total |

| | Graduate enrollment | | |
|---|---|---|---|
| Rank | Total | Full-time | Part-time |
| | 1,502 | 1,239 | 263 |
| | 65 | 64 | 1 |
| 41 | 1,567 | 1,303 | 264 |
| | 1,366 | 376 | 990 |
| chool | 182 | 134 | 48 |
| 42 | 1,548 | 510 | 1,038 |
| | 1,531 | 1,232 | 299 |
| 43 | 1,531 | 1,232 | 299 |
| | 1,524 | 1,055 | 469 |
| 44 | 1,524 | 1,055 | 469 |
| | 1,331 | 1,327 | 4 |
| | 158 | 158 | 0 |
| 45 | 1,489 | 1,485 | 4 |
| | 1,360 | 1,249 | 111 |
| | 122 | 113 | 9 |
| 46 | 1,482 | 1,362 | 120 |
| | 1,402 | 1,047 | 355 |
| | 53 | 49 | 4 |
| 47 | 1,455 | 1,096 | 359 |
| | 1,368 | 1,053 | 315 |
| | 85 | 80 | 5 |
| 48 | 1,453 | 1,133 | 320 |
| | 1,208 | 1,138 | 70 |
| | 245 | 238 | 7 |
| 49 | 1,453 | 1,376 | 77 |
| | 1,177 | 958 | 219 |
| | 274 | 263 | 11 |
| 50 | 1,451 | 1,221 | 230 |
| | 117,026 | 91,438 | 25,588 |

| Institution name | Graduate enrollment | | | |
|---|---|---|---|---|
| | Rank | Total | Full-time | Part-time |
| Arizona State University | | 1,440 | 946 | 494 |
| Total | 51 | 1,440 | 946 | 494 |
| University of Cincinnati | | 1,230 | 862 | 368 |
| University of Cincinnati College of Medicine | | 192 | 160 | 32 |
| Total | 52 | 1,422 | 1,022 | 400 |
| Colorado State University | | 1,391 | 1,213 | 178 |
| Total | 53 | 1,391 | 1,213 | 178 |
| Oregon State University | | 1,323 | 1,181 | 142 |
| Total | 54 | 1,323 | 1,181 | 142 |
| Yale University | | 1,100 | 1,092 | 8 |
| Yale University Medical School | | 207 | 206 | 1 |
| Total | 55 | 1,307 | 1,298 | 9 |
| University of North Carolina, Chapel Hill | | 1,121 | 1,080 | 41 |
| University of North Carolina Medical School, Chapel Hill | | 156 | 150 | 6 |
| Total | 56 | 1,277 | 1,230 | 47 |
| Temple University | | 1,097 | 793 | 304 |
| Temple University School of Medicine | | 163 | 142 | 21 |
| Total | 57 | 1,260 | 935 | 325 |
| Columbia University Teachers College | | 1,255 | 671 | 584 |
| Total | 58 | 1,255 | 671 | 584 |
| University of Georgia | | 1,224 | 1,161 | 63 |
| Total | 59 | 1,224 | 1,161 | 63 |
| Washington State University | | 1,204 | 1,026 | 178 |
| Total | 60 | 1,204 | 1,026 | 178 |
| Cumulative Total | | 130,129 | 102,121 | 28,008 |

Table I-15.—Con.

| Institution name | Graduate enrollment | | | |
|---|---|---|---|---|
| | Rank | Total | Full-time | Part-time |
| University of Utah | | 1,114 | 863 | 251 |
| University of Utah College of Medicine | | 89 | 85 | 4 |
| Total | 61 | 1,203 | 948 | 255 |
| Johns Hopkins University | | 669 | 643 | 26 |
| Johns Hopkins University School of Hygiene and Public Health; | | 430 | 355 | 75 |
| Johns Hopkins University School of Medicine | | 89 | 89 | 0 |
| Total | 62 | 1,188 | 1,087 | 101 |
| Oklahoma State University | | 1,181 | 983 | 198 |
| Total | 63 | 1,181 | 983 | 198 |
| Georgia Institute of Technology | | 1,144 | 857 | 287 |
| Total | 64 | 1,144 | 857 | 287 |
| St. Johns University, New York | | 1,141 | 462 | 679 |
| Total | 65 | 1,141 | 462 | 679 |
| Northwestern University | | 1,025 | 961 | 64 |
| Northwestern University Medical School | | 98 | 89 | 9 |
| Total | 66 | 1,123 | 1,050 | 73 |
| Rensselaer Polytechnic Institute | | 1,111 | 727 | 384 |
| Total | 67 | 1,111 | 727 | 384 |
| University of Kentucky | | 1,036 | 864 | 172 |
| University of Kentucky College of Medicine | | 56 | 55 | 1 |
| Total | 68 | 1,092 | 919 | 173 |
| Case Western Reserve University | | 849 | 602 | 247 |
| Case Western Reserve University School of Medicine | | 237 | 223 | 14 |
| Total | 69 | 1,086 | 825 | 261 |
| University of Nebraska | | 987 | 756 | 231 |
| University of Nebraska College of Medicine | | 80 | 23 | 57 |
| Total | 70 | 1,067 | 779 | 288 |
| Cumulative Total | | 141,465 | 110,758 | 30,707 |

| Institution name | Rank |
|---|---|
| Louisiana State University | |
| Louisiana State University, New Orleans Medical School | |
| Louisiana State University, Shreveport Medical School | |
| Total | 71 |
| Florida State University | |
| Total | 72 |
| California State University, San Diego | |
| Total | 73 |
| State University of New York at Binghamton | |
| Total | 74 |
| University of Virginia | |
| University of Virginia School of Medicine | |
| Total | 75 |
| Kansas State University | |
| Total | 76 |
| University of Rochester | |
| University of Rochester School of Medicine and Dentistry | |
| Total | 77 |
| Princeton University | |
| Total | 78 |
| University of Wisconsin-Milwaukee | |
| Total | 79 |
| University of Houston | |
| Total | 80 |
| Cumulative Total | |

| Rank | Graduate enrollment Total | Full-time | Part-time |
|---|---|---|---|
| | 1,114 | 863 | 251 |
| | 89 | 85 | 4 |
| 61 | 1,203 | 948 | 255 |
| | 669 | 643 | 26 |
| | 430 | 355 | 75 |
| | 89 | 89 | 0 |
| 62 | 1,188 | 1,087 | 101 |
| | 1,181 | 983 | 198 |
| 63 | 1,181 | 983 | 198 |
| | 1,144 | 857 | 287 |
| 64 | 1,144 | 857 | 287 |
| | 1,141 | 462 | 679 |
| 65 | 1,141 | 462 | 679 |
| | 1,025 | 961 | 64 |
| | 98 | 89 | 9 |
| 66 | 1,123 | 1,050 | 73 |
| | 1,111 | 727 | 384 |
| 67 | 1,111 | 727 | 384 |
| | 1,036 | 864 | 172 |
| | 56 | 55 | 1 |
| 68 | 1,092 | 919 | 173 |
| | 849 | 602 | 247 |
| | 237 | 223 | 14 |
| 69 | 1,086 | 825 | 261 |
| | 987 | 756 | 231 |
| | 80 | 23 | 57 |
| 70 | 1,067 | 779 | 288 |
| | 141,465 | 110,758 | 30,707 |

| Institution name | Rank | Graduate enrollment Total | Full-time | Part-time |
|---|---|---|---|---|
| Louisiana State University | | 1,002 | 855 | 147 |
| Louisiana State University, New Orleans Medical School | | 53 | 47 | 6 |
| Louisiana State University, Shreveport Medical School | | 7 | 7 | 0 |
| Total | 71 | 1,062 | 909 | 153 |
| Florida State University | | 1,012 | 958 | 54 |
| Total | 72 | 1,012 | 958 | 54 |
| California State University, San Diego | | 1,010 | 401 | 609 |
| Total | 73 | 1,010 | 401 | 609 |
| State University of New York at Binghamton | | 1,005 | 550 | 455 |
| Total | 74 | 1,005 | 550 | 455 |
| University of Virginia | | 876 | 772 | 104 |
| University of Virginia School of Medicine | | 113 | 113 | 0 |
| Total | 75 | 989 | 885 | 104 |
| Kansas State University | | 980 | 812 | 168 |
| Total | 76 | 980 | 812 | 168 |
| University of Rochester | | 694 | 616 | 78 |
| University of Rochester School of Medicine and Dentistry | | 280 | 258 | 22 |
| Total | 77 | 974 | 874 | 100 |
| Princeton University | | 953 | 953 | 0 |
| Total | 78 | 953 | 953 | 0 |
| University of Wisconsin-Milwaukee | | 950 | 646 | 304 |
| Total | 79 | 950 | 646 | 304 |
| University of Houston | | 948 | 618 | 330 |
| Total | 80 | 948 | 618 | 330 |
| Cumulative Total | | 151,348 | 118,365 | 32,983 |

Table I-15.—Con.

| Institution name | Rank | Graduate enrollment | | |
|---|---|---|---|---|
| | | Total | Full-time | Part-time |
| Newark College of Engineering | | 942 | 120 | 822 |
| Total | 81 | 942 | 120 | 822 |
| University of California, San Diego | | 891 | 863 | 28 |
| University of California, San Diego Medical School | | 47 | 47 | 0 |
| Total | 82 | 938 | 910 | 28 |
| University of Akron | | 932 | 314 | 618 |
| Total | 83 | 932 | 314 | 618 |
| University of Missouri, Rolla | | 926 | 491 | 435 |
| Total | 84 | 926 | 491 | 435 |
| University of Rhode Island | | 914 | 626 | 288 |
| Total | 85 | 914 | 626 | 288 |
| Washington University | | 815 | 685 | 130 |
| Washington University School of Medicine | | 97 | 95 | 2 |
| Total | 86 | 912 | 780 | 132 |
| West Virginia University | | 809 | 683 | 126 |
| West Virginia University School of Medicine | | 101 | 87 | 14 |
| Total | 87 | 910 | 770 | 140 |
| Duke University | | 689 | 634 | 55 |
| Duke University School of Medicine | | 205 | 189 | 16 |
| Total | 88 | 894 | 823 | 71 |
| University of California, Santa Barbara | | 890 | 784 | 106 |
| Total | 89 | 890 | 784 | 106 |
| University of New Mexico | | 836 | 525 | 311 |
| University of New Mexico School of Medicine | | 33 | 31 | 2 |
| Total | 90 | 869 | 556 | 313 |
| Cumulative Total | | 160,475 | 124,538 | 35,937 |
| Illinois Institute of Technology | | | | |
| Total | | | | |
| American University | | | | |
| Total | | | | |
| Naval Postgraduate School | | | | |
| Total | | | | |
| University of South Caroline | | | | |
| Total | | | | |
| University of Oregon | | | | |
| University of Oregon Medical School | | | | |
| Total | | | | |
| Southern Methodist University | | | | |
| Total | | | | |
| University of Delaware | | | | |
| Total | | | | |
| Boston University | | | | |
| Boston University School of Medicine | | | | |
| Total | | | | |
| Stevens Institute of Technology | | | | |
| Total | | | | |
| Texas Tech University | | | | |
| Total | | | | |
| Top 100 total | | | | |
| All other institutions, total | | | | |
| All institutions, total | | | | |

| | Graduate enrollment | | |
|---|---|---|---|
| Rank | Total | Full-time | Part-time |
| | 942 | 120 | 822 |
| 81 | 942 | 120 | 822 |
| | 891 | 863 | 28 |
| | 47 | 47 | 0 |
| 82 | 938 | 910 | 28 |
| | 932 | 314 | 618 |
| 83 | 932 | 314 | 618 |
| | 926 | 491 | 435 |
| 84 | 926 | 491 | 435 |
| | 914 | 626 | 288 |
| 85 | 914 | 626 | 288 |
| | 815 | 685 | 130 |
| ine .... | 97 | 95 | 2 |
| 86 | 912 | 780 | 132 |
| | 809 | 683 | 126 |
| icine ... | 101 | 87 | 14 |
| 87 | 910 | 770 | 140 |
| | 689 | 634 | 55 |
| | 205 | 189 | 16 |
| 88 | 894 | 823 | 71 |
| | 890 | 784 | 106 |
| 89 | 890 | 784 | 106 |
| | 836 | 525 | 311 |
| | 33 | 31 | 2 |
| 90 | 869 | 556 | 313 |
| | 160,475 | 124,538 | 35,937 |

| Institution name | Graduate enrollment | | | |
|---|---|---|---|---|
| | Rank | Total | Full-time | Part-time |
| Illinois Institute of Technology | | 866 | 426 | 440 |
| Total | 91 | 866 | 426 | 440 |
| American University | | 858 | 206 | 652 |
| Total | 92 | 858 | 206 | 652 |
| Naval Postgraduate School | | 852 | 852 | 0 |
| Total | 93 | 852 | 852 | 0 |
| University of South Carolina | | 850 | 608 | 242 |
| Total | 94 | 850 | 608 | 242 |
| University of Oregon | | 787 | 713 | 74 |
| University of Oregon Medical School | | 44 | 44 | 0 |
| Total | 95 | 831 | 757 | 74 |
| Southern Methodist University | | 829 | 349 | 480 |
| Total | 96 | 829 | 349 | 480 |
| University of Delaware | | 782 | 449 | 333 |
| Total | 97 | 782 | 449 | 333 |
| Boston University | | 752 | 529 | 223 |
| Boston University School of Medicine | | 29 | 6 | 23 |
| Total | 98 | 781 | 535 | 246 |
| Stevens Institute of Technology | | 775 | 145 | 630 |
| Total | 99 | 775 | 145 | 630 |
| Texas Tech University | | 760 | 619 | 141 |
| Total | 100 | 760 | 619 | 141 |
| Top 100 total | | 168,659 | 129,484 | 39,175 |
| All other institutions, total | | 49,303 | 34,834 | 14,469 |
| All institutions, total | | 217,962 | 164,318 | 53,644 |



106

107

# APPENDIX II

## Classification of Institutions in Survey

The 139 science doctorate institutions listed here may
elsewhere for the following principal reasons: (1) Differenc
other organizational components of university systems; (2)
engineering fields; (3) differences in the time period covered
longer period); and (4) differences in classifications based
degree granted respectively, in a particular period. Symbols be
classifications: 1) "First 20" refer to institutions chosen most
through 1973; 2) D—"Developing" institutions, those which g
M—"Medical Schools"; 4) I—"Intermediate," all remainin
science.

The institutions participating in the survey were classifie

(1) "*First 20.*" These institutions were selected by the m
period 1968-73. The NSF Graduate Fellowship Prograt
then select which graduate institutions they wish to
process, the number of Fellows in each year was totale
in rank order.

(2) *Developing.* The 85 institutions that began awarding
were considered to be developing graduate insti
comparison were provided by the Office of Educat

(3) *Medical.* The 104 medical schools that awarded scien
institutions were tabulated in 1973 so that their
comparative purposes. Since data from medical scho
they were in 1973, this category cannot be as meanin

(4) *Intermediate.* The 130 remaining schools that
"Intermediate."

# APPENDIX II

## tion of Institutions in Survey

The 339 science doctorate institutions listed here may differ from similar listings published elsewhere for the following principal reasons: (1) Differences in classifying branches, affiliates, or other organizational components of university systems; (2) variations in definitions of science and engineering fields; (3) differences in the time period covered by the classification (e.g., single year or longer period); and (4) differences in classifications based on level of degree offered or level of degree granted respectively, in a particular period. Symbols behind each name refer to the following classifications: 1) "First 20" refer to institutions chosen most frequently by NSF Fellows from 1968 through 1973; 2) D—"Developing" institutions, those which granted science Ph.D.'s after 1960-61; 3) M—"Medical Schools"; 4) I—"Intermediate," all remaining institutions granting doctorates in science.

The institutions participating in the survey were classified as follows:

(1) *"First 20."* These institutions were selected by the most number of NSF Fellows during the period 1968-73. The NSF Graduate Fellowship Program awards its stipends to individuals who then select which graduate institutions they wish to attend. On the basis of this selection process, the number of Fellows in each year was totaled and the institutions were then placed in rank order.

(2) *Developing.* The 85 institutions that began awarding science Ph.D.'s in academic year 1960-61 were considered to be developing graduate institutions for this report. Data for this comparison were provided by the Office of Education.

(3) *Medical.* The 104 medical schools that awarded science Ph.D.'s separately from their parent institutions were tabulated in 1973 so that their characteristics could be examined for comparative purposes. Since data from medical schools were not as representative in 1972 as they were in 1973, this category cannot be as meaningfully analyzed as the other categories.

(4) *Intermediate.* The 130 remaining schools that supplied data for 1973 were termed "Intermediate."

## ALABAMA

Auburn University-I
University of Alabama, Tuscaloosa-I
University of Alabama Medical School-M
University of Alabama, Birmingham-D

## ALASKA

University of Alaska-I

## ARIZONA

Arizona State University-D
University of Arizona-I
University of Arizona College of Medicine-M

## ARKANSAS

University of Arkansas-I
University of Arkansas Medical School-M

## CALIFORNIA

California Institute of Technology-First 20
California State University, San Diego-D
Claremont Graduate School and University Center-I
Loma Linda University-D
Loma Linda School of Medicine-M
Naval Postgraduate School-I
Stanford University-First 20
Stanford University School of Medicine-M
University of California, Berkeley-First 20
University of California, Davis-I
University of California, Davis Medical School-M
University of California, Irvine-D
University of California, Irvine Medical School-M
University of California, Los Angeles-First 20
University of California, Los Angeles Medical School-M
University of California, Riverside-D
University of California, San Diego-First 20
University of California, San Diego School of Medicine-M
University of California, San Francisco Medical School-M
University of California, Santa Barbara-D
University of California, Santa Cruz-D
University of the Pacific-D
University of Santa Clara-D
University of Southern California-I
University of Southern California Medical School-M
U.S. International University, California Western-D

## COLORADO

Colorado School of Mines-I
Colorado State University-I
University of Colorado-I
University of Colorado Medical School-M
University of Denver-I
University of Northern Colorado-D

## CONNECTICUT

University of Connecticut-I
University of Connecticut School of Medicine-M
Wesleyan University-D
Yale University-First 20
Yale University Medical School-M

## DELAWARE

University of Delaware-I

## DISTRICT OF COLUMBIA

American University-I
Catholic University-I
Georgetown University-I
Georgetown University Medical School-M
George Washington University-I
George Washington University Medical School-I
Howard University-I
Howard University Medical School-M

## FLORIDA

Florida Institute of Technology-D
Florida State University-I
Nova University-D
University of Florida-I
University of Florida College of Medicine-M
University of Miami-I
University of Miami School of Medicine-M
University of South Florida-D

## GEORGIA

Atlanta University-D
Emory University-I
Emory University School of Medicine-M
Georgia Institute of Technology-I
Georgia State University-D
Medical College of Georgia School of Medicine-M
University of Georgia-I

## HAWAII

University of Hawaii-I
University of Hawaii School of Medicine-M

## IDAHO

Idaho State Univer
University of Idaho

## ILLINOIS

Depaul University-
Illinois Institute of
Illinois State Univer
Loyola University-I
Loyola University,
Northern Illinois U
Northwestern Univ
Northwestern Univ
Southern Illinois U
University of Chica
University of Chica
University of Healt
University of Illinoi
University of Illinoi
University of Illinoi

## INDIANA

Ball State University
Indiana State Univ
Indiana University-
Indiana University
Purdue University-
University of Notre

## IOWA

Iowa State Univers
University of Iowa-
University of Iowa

## KANSAS

Kansas State Univer
University of Kansa
University of Kansa
Wichita State Univ

## KENTUCKY

University of Kentu
University of Kentu
University of Louis
University of Louis

University of Colorado-I
University of Colorado Medical School-M
University of Denver-I
University of Northern Colorado-D

## CONNECTICUT

University of Connecticut-I
University of Connecticut School of Medicine-M
Wesleyan University-D
Yale University-First 20
Yale University Medical School-M

## DELAWARE

University of Delaware-I

## DISTRICT OF COLUMBIA

American University-I
Catholic University-I
Georgetown University-I
Georgetown University Medical School-M
George Washington University-I
George Washington University Medical School-I
Howard University-I
Howard University Medical School-M

## FLORIDA

Florida Institute of Technology-D
Florida State University-I
Nova University-D
University of Florida-I
University of Florida College of Medicine-M
University of Miami-I
University of Miami School of Medicine-M
University of South Florida-D

## GEORGIA

Atlanta University-D
Emory University-I
Emory University School of Medicine-M
Georgia Institute of Technology-I
Georgia State University-D
Medical College of Georgia School of Medicine-M
University of Georgia-I

## HAWAII

University of Hawaii-I
University of Hawaii School of Medicine-M

## IDAHO

Idaho State University-D
University of Idaho-D

## ILLINOIS

Depaul University-D
Illinois Institute of Technology-I
Illinois State University-D
Loyola University-I
Loyola University, Chicago Stritch Medical School-M
Northern Illinois University-D
Northwestern University-I
Northwestern University Medical School-M
Southern Illinois University-I
University of Chicago-First 20
University of Chicago Pritzker School of Medicine-M
University of Health Sciences, Chicago Medical School-M
University of Illinois, Chicago Circle-D
University of Illinois College of Medicine-M
University of Illinois, Urbana-First 20

## INDIANA

Ball State University-D
Indiana State University-D
Indiana University-I
Indiana University School of Medicine-M
Purdue University-First 20
University of Notre Dame-I

## IOWA

Iowa State University-I
University of Iowa-I
University of Iowa College of Medicine-M

## KANSAS

Kansas State University-I
University of Kansas-I
University of Kansas School of Medicine-M
Wichita State University-D

## KENTUCKY

University of Kentucky-I
University of Kentucky College of Medicine-M
University of Louisville-I
University of Louisville School of Medicine-I

## LOUISIANA

Louisiana State University, Baton Rouge-I
Louisiana State University, New Orleans Medical School-M
Louisiana State University, Shreveport Medical School-M
Louisiana State University, New Orleans-D
Louisiana Technological University-D
Loyola University-D
Tulane University-I
Tulane University Medical School-M
University of Southwestern Louisiana-D

## MAINE

University of Maine-I

## MARYLAND

Johns Hopkins University-First 20
Johns Hopkins University School of Medicine-M
Johns Hopkins University School of Hygiene and Public Health-M
University of Maryland-I
University of Maryland School of Medicine-M

## MASSACHUSETTS

Boston College-I
Boston University-I
Boston University School of Medicine-M
Brandeis University-I
Clark University-I
Harvard University-First 20
Harvard University Medical School-M
Lowell Technological Institute-D
Massachusetts College of Pharmacy-I
Massachusetts Institute of Technology-First 20
Northeastern University-D
Smith College-D
Tufts University-I
Tufts University School of Medicine-M
University of Massachusetts-I
University of Massachusetts Medical School-M
Woods Hole Oceanographic Institute-D
Worcester Polytechnic Institute-D

## MICHIGAN

Michigan State University-I
Michigan State University College of Medicine-M
Michigan Technological University-D
University of Detroit-D
University of Michigan-First 20
University of Michigan Medical School-M
Wayne State University-I
Wayne State University School of Medicine-M
Western Michigan University-D

## MINNESOTA

University of Minnesota-I
University of Minnesota, Minneapolis Medical School-M

## MISSISSIPPI

Mississippi State University-I
University of Mississippi-I
University of Mississippi School of Medicine-M
University of Southern Mississippi-D

## MISSOURI

St. Louis University-I
St. Louis University School of Medicine-M
University of Missouri, Columbia-I
University of Missouri, Columbia School of Medicine-M
University of Missouri, Kansas City-D
University of Missouri, Rolla-I
Washington University-I
Washington University School of Medicine-M

## MONTANA

Montana State University-I
University of Montana-D

## NEBRASKA

Creighton University School of Medicine-M
University of Nebraska-I
University of Nebraska College of Medicine-M

## NEVADA

University of Nevada, Reno-D

## NEW HAMPSHIRE

Dartmouth College-D
Dartmough Medical School-M
University of New Hampshire-I

## NEW JERSEY

College of Medicine an
of New Jersey-M
Newark College of Engi
Princeton University-Fir
Rutgers, The State Univ
Rutgers College of Med
Dentistry-M
Seton Hall University-D
Stevens Institute of Tech

## NEW MEXICO

New Mexico Institute o
and Technology-D
New Mexico State Univ
University of New Mexi
University of New Mexi

## NEW YORK

Adelphi University-I
Alfred University-I
City University of New
City University of New
City University of New
Clarkson College of Te
Columbia University-Fi
Columbia University Co
Pharmaceutical Scien
Columbia University Co
and Surgeons-M
Columbia University Te
Cooper Union-D
Cornell University-First
Cornell University Med
Fordham University-I
Hofstra University-D
Mount Sinai School of
of New York-M
New School for Social
New York Medical Coll
New York University-I
New York University of
Polytechnic Institute of
Rensselaer Polytechnic
Rockefeller University-
St. Bonaventure Univer
St. Johns University-I
State University of New
State University of New
State University of New
State University of New
School of Medicine-

University of Michigan Medical School-M
Wayne State University-I
Wayne State University School of Medicine-M
Western Michigan University-D

## MINNESOTA

University of Minnesota-I
University of Minnesota, Minneapolis
Medical School-M

## MISSISSIPPI

Mississippi State University-I
University of Mississippi-I
University of Mississippi School
of Medicine-M
University of Southern Mississippi-D

## MISSOURI

St. Louis University-I
St. Louis University School of Medicine-M
University of Missouri, Columbia-I
University of Missouri, Columbia School
of Medicine-M
University of Missouri, Kansas City-D
University of Missouri, Rolla-I
Washington University-I
Washington University School of Medicine-M

## MONTANA

Montana State University-I
University of Montana-D

## NEBRASKA

Creighton University School of Medicine-M
University of Nebraska-I
University of Nebraska College of
Medicine-M

## NEVADA

University of Nevada, Reno-D

## NEW HAMPSHIRE

Dartmouth College-D
Dartmough Medical School-M
University of New Hampshire-I

## NEW JERSEY

College of Medicine and Dentistry
of New Jersey-M
Newark College of Engineering-D
Princeton University-First 20
Rutgers, The State University-I
Rutgers College of Medicine and
Dentistry-M
Seton Hall University-D
Stevens Institute of Technology-I

## NEW MEXICO

New Mexico Institute of Mining
and Technology-D
New Mexico State University-I
University of New Mexico-I
University of New Mexico School of Medicine-M

## NEW YORK

Adelphi University-I
Alfred University-I
City University of New York, Brooklyn College-D
City University of New York, City College-D
City University of New York Graduate Division-D
Clarkson College of Technology-D
Columbia University-First 20
Columbia University College of
Pharmaceutical Sciences-I
Columbia University College of Physicians
and Surgeons-M
Columbia University Teachers College-D
Cooper Union-D
Cornell University-First 20
Cornell University Medical School-M
Fordham University-I
Hofstra University-D
Mount Sinai School of Medicine, City University
of New York-M
New School for Social Research-I
New York Medical College-M
New York University-I
New York University of Medicine-M
Polytechnic Institute of Brooklyn-I
Rensselaer Polytechnic Institute-I
Rockefeller University-First 20
St. Bonaventure University-I
St. Johns University-I
State University of New York at Albany-D
State University of New York at Binghamton-D
State University of New York at Buffalo-I
State University of New York at Buffalo,
School of Medicine-M

New York—con.

State University of New York, College of Environmental Science and Forestry-I
State University of New York, Downstate Medical Center-M
State University of New York, Stony Brook-D
State University of New York, Stony Brook School of Medicine-M
State University of New York, Upstate College of Medicine-M
Syracuse University-I
Union College and University-I
Union University, Albany Medical College-M
University of Rochester-I
University of Rochester School of Medicine and Dentistry-M
Yeshiva University-I
Yeshiva University, Albert Einstein College of Medicine-M

## NORTH CAROLINA

Duke University-I
Duke University School of Medicine-M
University of North Carolina, Chapel Hill-I
University of North Carolina, Greensboro-D
University of North Carolina Medical School-M
North Carolina State University, Raleigh-I
Wake Forest University-D
Wake Forest University, Bowman Gray School of Medicine-M

## NORTH DAKOTA

North Dakota State University-D
University of North Dakota-I
University of North Dakota School of Medicine-M

## OHIO

Air Force Institute of Technology-D
Bowling Green State University-D
Case Western Reserve University-I
Case Western Reserve University School of Medicine-M
Kent State University-D
Miami University-D
Ohio State University-I
Ohio State University College of Medicine-M
Ohio University-I
University of Akron-I
University of Cincinnati-I
University of Cincinnati College of Medicine-M
University of Dayton-D
University of Toledo-D

## OKLAHOMA

Oklahoma State University-I
University of Oklahoma-I
University of Oklahoma College of Medicine-M
University of Tulsa-D

## OREGON

Oregon Graduate Center-D
Oregon State University-I
Portland State University-D
University of Oregon-I
University of Oregon Medical School-M
University of Portland-I

## PENNSYLVANIA

Bryn Mawr College-I
Carnegie-Mellon University-I
Drexel University-D
Duquesne University-I
Hahnemann Medical College and Hospital-M
Jefferson Medical College of Thomas Jefferson University-M
Lehigh University-I
The Medical College of Pennsylvania-M
Pennsylvania State University-I
Pennsylvania State University College of Medicine-M
Philadelphia College of Pharmacy and Science-I
Temple University-I
Temple University School of Medicine-M
University of Pennsylvania-First 20
University of Pennsylvania School of Medicine-M
University of Pittsburgh-I
University of Pittsburgh School of Medicine-M
Villanova University-D

## RHODE ISLAND

Brown University-I
Brown University Division of Biological and Medical Sciences-M
Providence Colleg
University of Rhod

## SOUTH CAROL

Clemson University
Medical University
College of Medic
University of South

## SOUTH DAKOT

South Dakota Scho
and Technology-
South Dakota State
University of South
University of South
of Medicine-M

## TENNESSEE

George Peabody C
Memphis State Uni
Meharry College Sc
University of Tenne
University of Tenne
of Medicine-M
Vanderbilt Universi
Vanderbilt Universi
of Medicine-M

## TEXAS

Baylor University-I
Baylor College of M
North Texas State U
Rice University-I
Southern Methodis
Texas A&M Univers
Texas Christian Uni
Texas Tech Univers
Texas Woman's Uni
University of Houst
University of Texas,
University of Texas,
University of Texas,
University of Texas,
University of Texas
Galveston-M
University of Texas,
Medical School-M
University of Texas
School-M

University of Cincinnati-I
University of Cincinnati College of Medicine-M
University of Dayton-D
University of Toledo-D

## OKLAHOMA

Oklahoma State University-I
University of Oklahoma-I
University of Oklahoma College of Medicine-M
University of Tulsa-D

## OREGON

Oregon Graduate Center-D
Oregon State University-I
Portland State University-D
University of Oregon-I
University of Oregon Medical School-M
University of Portland-I

## PENNSYLVANIA

Bryn Mawr College-I
Carnegie-Mellon University-I
Drexel University-D
Duquesne University-I
Hahnemann Medical College and Hospital-M
Jefferson Medical College of Thomas Jefferson University-M
Lehigh University-I
The Medical College of Pennsylvania-M
Pennsylvania State University-I
Pennsylvania State University College of Medicine-M
Philadelphia College of Pharmacy and Science-I
Temple University-I
Temple University School of Medicine-M
University of Pennsylvania-First 20
University of Pennsylvania School of Medicine-M
University of Pittsburgh-I
University of Pittsburgh School of Medicine-M
Villanova University-D

## RHODE ISLAND

Brown University-I
Brown University Division of Biological and Medical Sciences-M
Providence College-D
University of Rhode Island-I

## SOUTH CAROLINA

Clemson University-D
Medical University of South Carolina College of Medicine-M
University of South Carolina-I

## SOUTH DAKOTA

South Dakota School of Mines and Technology-D
South Dakota State University-I
University of South Dakota-I
University of South Dakota School of Medicine-M

## TENNESSEE

George Peabody College-I
Memphis State University-D
Meharry College School of Medicine-M
University of Tennessee-I
University of Tennessee College of Medicine-M
Vanderbilt University-I
Vanderbilt University School of Medicine-M

## TEXAS

Baylor University-I
Baylor College of Medicine-M
North Texas State University-D
Rice University-I
Southern Methodist University-D
Texas A&M University-I
Texas Christian University-D
Texas Tech University-I
Texas Woman's University-D
University of Houston-I
University of Texas, Arlington-D
University of Texas, Austin-I
University of Texas, Dallas-D
University of Texas, Houston Medical School-M
University of Texas Medical Branch, Galveston-M
University of Texas, San Antonio Medical School-M
University of Texas Southwestern Medical School-M

## UTAH

Brigham Young University-I
University of Utah-I
University of Utah College of Medicine-M
Utah State University-I

## VERMONT

University of Vermont-D
University of Vermont College of-Medicine-M

## VIRGINIA

College of William and Mary-D
Institute of Textile Technology-D
University of Virginia-I
University of Virginia School of Medicine-M
Virginia Commonwealth University-I
Virginia Commonwealth University Medical College of Virginia-M
Virginia Polytechnic Institute-I

## WASHINGTON

University of Washington-First 20
University of Washington School of Medicine-M
Washington State University-I

## WEST VIRGINIA

West Virginia University-I
West Virginia University School of Medicine-M

## WISCONSIN

Lawrence University Institute of Paper Chemistry-I
Marquette University-I
Medical College of Wisconsin-M
University of Wisconsin, Madison-First 20
University of Wisconsin Medical School-M
University of Wisconsin-Milwaukee-I

## WYOMING

University of Wyoming-I

## PUERTO RICO

University of Puerto Rico School of Medicine-M
University of Puerto Rico, Rio Piedras-D

# APPENDIX III

## A Listing of Statistical Tables


A-1 through A-33: All Graduate Departments, 1973

B-1 through B-33: Doctorate Departments, 1973 .....

C-1 through C-16: All Graduate Departments, 1971-73

D-1 through D-13: All Full-Time Graduate Students, 1972 and 1973 .....

E-1 through D-13: Full-Time Graduate Students in Doctorate Departments, 1972 and 1973 .....




ALL GRADUATE DEPARTMENTS, 1973


A-1. Graduate students in all graduate departments, by field of science and enrollment status, 1973 ..... A-18.

A-2. Graduate students in all graduate departments, by field of science, enrollment status, and level of study, 1973 .... A-19.

A-3. Graduate students in all graduate departments, by field of science, control of institution, and level of study, 1973 A-20.

A-4. Full-time graduate students in all graduate departments, by field of science, control of institution, and level of study, 1973 A-21.

A-5. Part-time graduate students in all graduate departments, by field of science, control of institution, and level of study, 1973 A-22.

A-6. Graduate students in all graduate departments, by State, enrollment status, and source of major support, 1973 A-23.

A-7. Full-time graduate students in all graduate departments, by field of science, and citizenship, 1973 ..... A-24.

A-8. Full-time graduate students in all graduate departments, by field of science and sex of student, 1973..... A-25.

A-9. Full-time graduate students in all graduate departments, by field of science, sex of student, and level of study, 1973 A-26.

A-10. Full-time graduate students in all graduate departments, by field of science and type of major support, 1973 ..... A-27.

A-11. First-year full-time graduate students in all graduate departments, by field of science and type of major support, 1973 A-28.

A-12. Full-time graduate students beyond their first year in all graduate departments, by field of science and type of major support, 1973..... A-29.

A-13. Full-time graduate students in all graduate departments, by area of science, citizenship, and type of major support, 1973..... A-30.

A-14. Full-time graduate students in all graduate departments, by source of major support and area of science, 1973 A-31.

A-15. First-year full-time graduate students in all graduate departments, by source of major support and area of science, 1973

A-16. Full-time graduate students beyond their first year in all graduate departments, by source of major support and area of science, 1973 .....

A-17. Full-time graduate students in all graduate departments, by source of major support, area of science, and sex of student, 1973 .....

# APPENDIX III

## tatistical Tables


te Departments, 1973

epartments, 1973 .....

e Departments, 1971-73

ne Graduate Students,
73 .....

Graduate Students in
Departments, 1972 and
.....


ALL GRADUATE DEPARTMENTS, 1973


A-1. Graduate students in all graduate departments, by field of science and enrollment status, 1973 .....

A-2. Graduate students in all graduate departments, by field of science, enrollment status, and level of study, 1973 ....

A-3. Graduate students in all graduate departments, by field of science, control of institution, and level of study, 1973

A-4. Full-time graduate students in all graduate departments, by field of science, control of institution, and level of study, 1973

A-5. Part-time graduate students in all graduate departments, by field of science, control of institution, and level of study, 1973

A-6. Graduate students in all graduate departments, by State, enrollment status, and source of major support, 1973

A-7. Full-time graduate students in all graduate departments, by field of science, and citizenship, 1973 .....

A-8. Full-time graduate students in all graduate departments, by field of science and sex of student, 1973 .....

A-9. Full-time graduate students in all graduate departments, by field of science, sex of student, and level of study, 1973

A-10. Full-time graduate students in all graduate departments, by field of science and type of major support, 1973 .....

A-11. First-year full-time graduate students in all graduate departments, by field of science and type of major support, 1973

A-12. Full-time graduate students beyond their first year in all graduate departments, by field of science and type of major support, 1973 .....

A-13. Full-time graduate students in all graduate departments, by area of science, citizenship, and type of major support, 1973 .....

A-14. Full-time graduate students in all graduate departments, by source of major support and area of science, 1973

A-15. First-year full-time graduate students in all graduate departments, by source of major support and area of science, 1973

A-16. Full-time graduate students beyond their first year in all graduate departments, by source of major support and area of science, 1973 .....

A-17. Full-time graduate students in all graduate departments, by source of major support, area of science, and sex of student, 1973 .....

A-18. Full-time graduate students in all departments, by source and type of major support, 1973 .....

A-19. First-year full-time graduate students in all graduate departments, by source and type of major support, 1973 .....

A-20. Full-time graduate students beyond their first year in all graduate departments, by source and type of major support, 1973

A-21. Full-time graduate students in all graduate departments of publicly controlled institutions, by source and type of major support, 1973 .....

A-22. First-year full-time graduate students in all graduate departments of publicly controlled institutions, by source and type of major support, 1973 .....

A-23. Full-time graduate students beyond their first year in all graduate departments of publicly controlled institutions, by source and type of major support, 1973 .....

A-24. Full-time graduate students in all graduate departments of privately controlled institutions, by source and type of major support, 1973 .....

A-25. First-year full-time graduate students in all graduate departments of privately controlled institutions, by source and type of major support, 1973 .....

A-26. Full-time graduate students beyond their first year in all graduate departments of privately controlled institutions, by source and type of major support, 1973

A-27. Full-time students in all graduate departments supported by U. S. Government sources, by field of science and Federal agency, 1973 .....

A-28. First-year full-time graduate students in all graduate departments supported by U. S. Government sources, by field of science and Federal agency, 1973 .....

A-29. Full-time graduate students beyond their first year in all graduate departments supported by U. S. Government sources, by field of science and Federal agency, 1973 .....

A-30. Full-time graduate students in all graduate departments supported by non-U. S. Government sources, by field of science, 1973 .....

A-31. First-year full-time graduate students in all graduate departments supported by non-U. S. Government sources, by field of science, 1973 .....

A-32. Full-time graduate students beyond their first year in all graduate departments supported by non-U. S. Government sources, by field of science, 1973
A-33. Postdoctorals in all graduate departments, by field of science and source of support, 1973

DOCTORATE DEPARTMENTS, 1973

B-1. Graduate students in doctorate departments, by field of science and enrollment status, 1973
B-2. Graduate students in doctorate departments, by field of science, enrollment status, and level of study, 1973
B-3. Graduate students in doctorate departments, by field of science, control of institution, and level of study, 1973
B-4. Full-time graduate students in doctorate departments, by field of science, control of institution, and level of study, 1973
B-5. Part-time graduate students in doctorate departments, by field of science, control of institution, and level of study, 1973
B-6. Graduate students in doctorate departments, by State, enrollment status, and source of major support, 1973
B-7. Full-time graduate students in doctorate departments, by field of science and citizenship, 1973
B-8. Full-time graduate students in doctorate departments, by field of science and sex of student, 1973
B-9. Full-time graduate students in doctorate departments, by field of science, sex of student, and level of study, 1973
B-10. Full-time graduate students in doctorate departments, by field of science and type of major support, 1973
B-11. First-year full-time graduate students in doctorate departments, by field of science and type of major support, 1973
B-12. Full-time graduate students beyond their first year in doctorate departments, by field of science and type of major support, 1973
B-13. Full-time graduate students in doctorate departments, by area of science, citizenship, and type of major support, 1973
B-14. Full-time graduate students in doctorate departments, by source of major support and area of science, 1973
B-15. First-year full-time graduate students in doctorate departments, by source of major support and area of science, 1973
B-16. Full-time graduate students beyond their first year in doctorate departments, by source of major support and area of science, 1973
B-17. Full-time graduate students in doctorate departments, by source of major support, area of science, and sex of student, 1973
B-18. Full-time graduate students in doctorate departments, by source and type of major support, 1973
B-19. First-year full-time graduate students in doctorate departments, by source and type of major support, 1973
B-20. Full-time graduate students beyond their first year in doctorate departments, by source and type of major support, 1973
B-21. Full-time graduate students in doctorate departments of publicly controlled institutions, by source and type of major support, 1973
B-22. First-year full-time graduate students in doctorate departments of publicly controlled institutions, by source and type of major support, 1973
B-23. Full-time graduate students beyond their first year in doctorate departments of publicly controlled institutions, by source and type of major support, 1973
B-24. Full-time graduate students in doctorate departments of privately controlled institutions, by source and type of major support, 1973
B-25. First-year graduate students in doctorate departments of privately controlled institutions, by source of major support, 1973
B-26. Full-time graduate students beyond their first year in doctorate departments of privately controlled institutions, by source and type of major support, 1973
B-27. Full-time graduate students in doctorate departments supported by U. S. Government sources, by field of science and Federal agency, 1973
B-28. First-year full-time graduate students in doctorate departments supported by U. S. Government sources, by field of science and Federal agency, 1973
B-29. Full-time doctorate students beyond their first year in doctorate departments supported by U. S. Government sources, by field of science and Federal agency, 1973
B-30. Full-time students in doctorate departments supported by non-U. S. Government sources, by field of science, 1973
B-31.
B-32.
B-33.

ALL GRADUA
C-1.
C-2.
C-3.
C-4.
C-5.
C-6.
C-7.
C-8.
C-9.
C-10.
C-11.
C-12.

B-16. Full-time graduate students beyond their first year in doctorate departments, by source of major support and area of science, 1973 .....
B-17. Full-time graduate students in doctorate departments, by source of major support, area of science, and sex of student, 1973 .....
B-18. Full-time graduate students in doctorate departments, by source and type of major support, 1973 .....
B-19. First-year full-time graduate students in doctorate departments, by source and type of major support, 1973 .....
B-20. Full-time graduate students beyond their first year in doctorate departments, by source and type of major support, 1973
B-21. Full-time graduate students in doctorate departments of publicly controlled institutions, by source and type of major support, 1973 .....
B-22. First-year full-time graduate students in doctorate departments of publicly controlled institutions, by source and type of major support, 1973 .....
B-23. Full-time graduate students beyond their first year in doctorate departments of publicly controlled institutions, by source and type of major support, 1973 .....
B-24. Full-time graduate students in doctorate departments of privately controlled institutions, by source and type of major support, 1973 .....
B-25. First-year graduate students in doctorate departments of privately controlled institutions, by source of major support, 1973
B-26. Full-time graduate students beyond their first year in doctorate departments of privately controlled institutions, by source and type of major support, 1973
B-27. Full-time graduate students in doctorate departments supported by U. S. Government sources, by field of science and Federal agency, 1973 .....
B-28. First-year full-time graduate students in doctorate departments supported by U. S. Government sources, by field of science and Federal agency, 1973 .....
B-29. Full-time doctorate students beyond their first year in doctorate departments supported by U. S. Government sources, by field of science and Federal agency, 1973 .....
B-30. Full-time students in doctorate departments supported by non-U. S. Government sources, by field of science, 1973
B-31. First-year full-time graduate students in doctorate departments supported by non-U. S. Government sources, by field of science, 1973 .....
B-32. Full-time graduate students beyond their first year in doctorate departments supported by non-U. S. Government sources, by field of science, 1973 .....
B-33. Postdoctorals in doctorate departments, by field of science and source of support, 1973 .....

ALL GRADUATE DEPARTMENTS, 1971-73

C-1. Graduate students in all graduate departments, by field of science and enrollment status, 1971-73 .....
C-2. Graduate students in all graduate departments, by field of science and level of study, 1971-73 .....
C-3. Graduate students in all graduate departments in publicly controlled institutions, by field of science and level of study, 1971-73 .....
C-4. Graduate students in all graduate departments in privately controlled institutions, by field of science and level of study, 1971-73 .....
C-5. Full-time graduate students in all graduate departments, by field of science and level of study, 1971-73 .....
C-6. Full-time graduate students in all graduate departments in publicly controlled institutions, by field of science and level of study, 1971-73 .....
C-7. Full-time graduate students in all graduate departments in privately controlled institutions, by field of science and level of study, 1971-73 .....
C-8. Part-time graduate students in all graduate departments, by field of science and level of study, 1971-73 .....
C-9. Part-time graduate students in all graduate departments in publicly controlled institutions, by field of science and level of study, 1971-73 .....
C-10. Part-time graduate students in all graduate departments in privately controlled institutions, by field of science and level of study, 1971-73 .....
C-11. Full time graduate students in all graduate departments, by field of science and source of support, 1971-73 .....
C-12. Full-time graduate students in all graduate departments in publicly controlled institutions, by field of science and source of support, 1971-73 .....

C-13. Full-time graduate students in all graduate departments in privately controlled institutions, by field of science and source of support, 1971-73 ..... C-14
C-14. Postdoctorals in all graduate departments, by field of science, 1971-73 C-15
C-15. Postdoctorals in all graduate departments, in publicly controlled institutions, by field of science, 1971-73 ..... C-16
C-16. Postdoctorals in all graduate departments, in privately controlled institutions, by field of science, 1971-73

ALL FULL-TIME GRADUATE STUDENTS, 1972 AND 1973

D-1. Full-time graduate students in all graduate departments by field of science and type of major support, 1972 and 1973
D-2. Full-time graduate students in publicly controlled institutions, by field of science and type of major support, 1972 and 1973 .....
D-3. Full-time graduate students in all graduate departments in privately controlled institutions, by field of science and type of major support, 1972 and 1973 .....
D-4. First-year full-time graduate students in all graduate departments, by field of science and type of major support, 1972 and 1973 .....
D-5. Full-time graduate students beyond their first year in all graduate departments, by field of science and type of major support, 1972 and 1973 .....
D-6. Full-time U.S. citizen graduate students in all graduate departments, by field of science and type of major support, 1972 and 1973 .....
D-7. Full-time foreign graduate students in all graduate departments, by field of science and type of major support, 1972 and 1973 .....
D-8. Full-time graduate students in all graduate departments, by source and type of major support, 1972 and 1973 .....
D-9. Full-time graduate students in all graduate departments, by source and type of major support and control of institution, 1972 and 1973 .....
D-10A. Full-time graduate students in all graduate departments, by source and type of major support and citizenship, 1972 and 1973 .....
D-10B. Full-time graduate students in engineering graduate departments, by source and type of major support and citizenship, 1972 and 1973 .....
D-10C. Full-time graduate students in physical science graduate departments, by source and type of major support and citizenship, 1972 and 1973 ..... E-6
D-10D. Full-time graduate students in mathematical science graduate departments, by source and type of major support and citizenship, 1972 and 1973 ..... E-7
D-10E. Full-time graduate students in life science graduate departments, by source and type of major support and citizenship, 1972 and 1973 ..... E-8
D-10F. Full-time graduate students in psychology graduate departments, by source and type of major support and citizenship, 1972 and 1973 ..... E-9
D-10G. Full-time graduate students in social science graduate departments, by source and type of major support and citizenship, 1972 and 1973 ..... E-10A
D-10H. Full-time graduate students in all other sciences, nec, graduate departments, by source and type of major support and citizenship, 1972 and 1973 ..... E-10B
D-11. Full-time graduate students in all graduate departments, by level of study, control of institution, and type of major support, 1972 and 1973 ..... E-10C
D-12. Full-time graduate students in all graduate departments, by level of study, citizenship, and type of major support, 1972 and 1973 ..... E-10D
D-13. Full-time graduate students in all graduate departments, by area of science, level of study, and type of institution, 1972 and 1973 ..... E-10E

FULL-TIME GRADUATE STUDENTS IN DOCTORATE DEPARTMENTS, 1972 AND 1973

E-1. Full-time graduate students in doctorate departments, by field of science and type of major support, 1972 and 1973 ..... E-10F
E-2. Full-time graduate students in doctorate departments in publicly controlled institutions, by field of science and type of major support, 1972 and 1973 ..... E-10G
E-3. Full-time graduate students in doctorate departments in privately controlled institutions, by field of science and type of major support, 1972 and 1973 ..... E-10H
E-4. First-year full-time graduate students in doctorate departments, by field of science and type of major support, 1972 and 1973 ..... E-11
E-5. Full-time graduate students beyond their first year in doctorate departments, by field of science and type of major support, 1972 and 1973 ..... E-12

D-10C. Full-time graduate students in physical science graduate departments, by source and type of major support and citizenship, 1972 and 1973

D-10D. Full-time graduate students in mathematical science graduate departments, by source and type of major support and citizenship, 1972 and 1973

D-10E. Full-time graduate students in life science graduate departments, by source and type of major support and citizenship, 1972 and 1973

D-10F. Full-time graduate students in psychology graduate departments, by source and type of major support and citizenship, 1972 and 1973

D-10G. Full-time graduate students in social science graduate departments, by source and type of major support and citizenship, 1972 and 1973

D-10H. Full-time graduate students in all other sciences, nec, graduate departments, by source and type of major supoort and citizenship, 1972 and 1973

D-11. Full-time graduate students in all graduate departments, by level of study, control of institution, and type of major support, 1972 and 1973

D-12. Full-time graduate students in all graduate departments, by level of study, citizenship, and type of major support, 1972 and 1973

D-13. Full-time graduate students in all graduate departments, by area of science, level of study, and type of institution, 1972 and 1973


FULL-TIME GRADUATE STUDENTS
IN DOCTORATE DEPARTMENTS, 1972 AND 1973


E-1. Full-time graduate students in doctorate departments, by field of science and type of major support, 1972 and 1973

E-2. Full-time graduate students in doctorate departments in publicly controlled institutions, by field of science and type of major support, 1972 and 1973

E-3. Full-time graduate students in doctorate departments in privately controlled institutions, by field of science and type of major support, 1972 and 1973

E-4. First-year full-time graduate students in doctorate departments, by field of science and type of major support, 1972 and 1973

E-5. Full-time graduate students beyond their first year in doctorate departments, by field of science and type of major support, 1972 and 1973

E-6. Full-time U. S. citizen graduate students in doctorate departments, by field of science and type of major support, 1972 and 1973

E-7. Full-time foreign graduate students in doctorate departments, by field of science and type of major support, 1972 and 1973

E-8. Full-time graduate students in doctorate departments, by source and type of major support, 1972 and 1973

E-9. Full-time graduate students in doctorate departments, by source and type of major support and control of institution, 1972 and 1973

E-10A. Full-time graduate students in doctorate departments, by source and type of major support and citizenship, 1972 and 1973

E-10B. Full-time graduate students in engineering doctorate departments, by source and type of major support and citizenship, 1972 and 1973

E-10C. Full-time graduate students in physical science doctorate departments, by source and type of major support and citizenship, 1972 and 1973

E-10D. Full-time graduate students in mathematical science doctorate departments, by source and type of major support and citizenship, 1972 and 1973

E-10E. Full-time graduate students in life science doctorate departments, by source and type of major support and citizenship, 1972 and 1973

E-10F. Full-time graduate students in psychology doctorate departments, by source and type of major support and citizenship, 1972 and 1973

E-10G. Full-time graduate students in social science doctorate departments, by source and type of major support and citizenship, 1972 and 1973

E-10H. Full-time graduate students in all other sciences, nec, doctorate departments, by source and type of major support and citizenship, 1972 and 1973

E-11. Full-time graduate students in all doctorate departments, by level of study, control of institution, and type of major support, 1972 and 1973

E-12. Full-time graduate students in all doctorate departments, by level of study, 1972 and 1973

E-13. Full-time graduate students in all doctorate departments, by area of science, level of study, and type of institution, 1972 and 1973

# APPENDIX IV

## Instructions and Consolidated Departmental Data Sheets


| | Page |
|---|---|
| Instructions, Fall 1973 | 55 |
| Departmental Data Sheet, Fall 1973 | 56 |
| Consolidated Departmental Data Sheets, 1973: | |
| IV-1 through IV-8: All Graduate Departments, 1973 | 57 |
| IV-9 through IV-16: Master's Departments, 1973 | 65 |
| IV-17 through IV-24: Doctorate Departments, 1973 | 73 |
| IV-25: Doctorate Departments in Medical Schools, 1973 | 81 |
| IV-26: Graduate Departments in Public Schools, 1973 | 82 |
| IV-27: Graduate Departments in Private Schools, 1973 | 83 |
| Instructions, Fall 1972 | 84 |
| Departmental Data Sheet, Fall 1972 | 85 |

# INSTRUCTIONS FOR COMPLETING THE DEPARTMENTAL DATA SHEET

**GENERAL:**

A Departmental Data Sheet (NSF Form 812) is to be completed by each science and engineering department that supplied similar data in our 1972 survey, plus any newly formed departments or any departments that were inadvertently omitted last year.

In addition, the National Institutes of Health has supplied a complete list of all basic science and clinical departments for reference by medical schools to improve coverage in these fields. If departments on this list do not actually enroll graduate students or have any postdoctoral appointees, please complete a Form 812 marked NONE and return to NSF.

A graduate student, whether full- or part-time, should be reported in only one department.

If a science department did not enroll graduate students in Fall 1973 but did have postdoctoral appointees, please write "NONE" across Items 5 and 6 and move to Item 7.

Care should be taken to submit as complete and accurate a report as possible in order that machine editing time can be reduced and more timely statistics can be made available.

This form is being mailed to all institutions of higher education in the U. S. that confer doctoral-level degrees in at least one of the following fields of science:

**Engineering**
- Aeronautical
- Agricultural
- Chemical
- Civil
- Electrical
- Engineering science
- Industrial
- Mechanical
- Metallurgical and materials
- Mining
- Nuclear
- Petroleum
- Other engineering

**Physical sciences**
- Astronomy
- Atmospheric sciences
- Chemistry
- Geosciences
- Oceanography
- Physics

**Mathematical sciences**
- Applied mathematics
- Mathematics
- Statistics

**Life sciences**
- Agriculture
- Anatomy
- Biochemistry
- Biology
- Biophysics
- Botany
- Clinical medical sciences
- Ecology
- Genetics
- Microbiology
- Pathology
- Pharmacology
- Physiology
- Zoology
- Other life sciences

**Psychology**
- Clinical psychology
- Experimental psychology
- Human development
- Physiological psychology
- Social psychology
- Other psychology

**Social sciences**
- Agricultural economics
- Anthropology
- Economics (except agricultural)
- Geography
- History and philosophy of science
- Linguistics
- Political science
- Sociology

Item 4—**Highest degree offered.** Check the box which refers to the highest degree offered by this science department in October 1973.

Item 5—A **full-time graduate student** is defined here as a student enrolled for an advanced degree (not a regular staff member, e.g., an instructor) who is engaged in training activities in his field of science; these activities may embrace **any** appropriate combination of study, teaching, and research, depending upon your institution's own policy. (Some institutions use the phrase "geographical full-time student" to describe such students.) All other graduate students enrolled for advanced degrees are considered part time and should be reported under Item 6. **Exclude** students who are not formally enrolled for study or dissertation and "special" or unclassified students taking courses at the graduate level but not enrolled for degrees.

Students are to be classified according to citizenship, i.e., **U.S.** citizens (or nationals, e.g., native residents of a possession of the U. S. such as American Samoa), and **foreign** students. Applicants for U. S. citizenship are to be considered as "foreign" until the date their citizenship becomes effective.

A **first-year** graduate student is defined as one who will have completed **less than a full year** of graduate study as of the beginning of the Fall term of 1973. All other students should be considered beyond first year.

Report the number of full-time graduate students in the appropriate column where they receive most of their support. If a graduate student receives stipend support from more than one source, choose the **major** source. For cases of two or more being enrolled for an advanced degree. For instance, graduate students supported by the AEC at Oak Ridge National Laboratory are enrolled for degree-credit at the University of Tennessee, Knoxville, and are to be included in the survey. Please note that support for graduate students by NIH, column (d), should **exclude** support from NIMH, which should be reported under "other, HEW," column (e).

"Institutional Support," column (j), refers to support from "This" institution, as well as from State and local governments. Students who are employees of an organization and whose major support is provided by their employer should be listed under column (l) "Other U.S. Sources." Those receiving most of their support from personal, family, and loan sources should be reported under column (m), "Self, Loans, and Family."

Item 6—The number of graduate students who are working for advanced degrees, but who are not pursuing graduate work full time as defined in Item 5, are enumerated under the entries for **part time.** Part-time graduate students who have completed less than a full year of study in Fall 1973 are counted in column (a), "First Year;" all other part-time students are to be counted under (b), "Beyond First."

Item 7—Under **Postdoctorals** and/or **Research Associates,** include individuals with science or engineering doctorates and M.D.'s (including foreign degrees that are equivalent to U.S. doctorates) who devote **full time** to research activities or study in the department under temporary appointments carrying no academic rank such as instructor or above. Such appointments are usually for a **specific time period.** They may contribute to the

a Form 612 marked NONE and return to NSF.

the following fields of science:

**Engineering**
- Aeronautical
- Agricultural
- Chemical
- Civil
- Electrical
- Engineering science
- Industrial
- Mechanical
- Metallurgical and materials
- Mining
- Nuclear
- Petroleum
- Other engineering

**Physical sciences**
- Astronomy
- Atmospheric sciences
- Chemistry
- Geosciences
- Oceanography
- Physics

**Mathematical sciences**
- Applied mathematics
- Mathematics
- Statistics

**Life sciences**
- Agriculture
- Anatomy
- Biochemistry
- Biology
- Biophysics
- Botany
- Clinical medical sciences
- Ecology
- Genetics
- Microbiology
- Pathology
- Pharmacology
- Physiology
- Zoology
- Other life sciences

**Psychology**
- Clinical psychology
- Experimental psychology
- Human development
- Physiological psychology
- Social psychology
- Other psychology

**Social sciences**
- Agricultural economics
- Anthropology
- Economics (except agricultural)
- Geography
- History and philosophy of science
- Linguistics
- Political science
- Sociology

Item 4—**Highest degree offered.** Check the box which refers to the highest degree offered by this science department in October 1973.

Item 5—A **full-time graduate student** is defined here as a student enrolled for an advanced degree (not a regular staff member, e.g., an instructor) who is engaged in training activities in his field of science; these activities may embrace **any** appropriate combination of study, teaching, and research, depending upon your institution's own policy. (Some institutions use the phrase "geographical full-time student" to describe such students.) All other graduate students enrolled for advanced degrees are considered part time and should be reported under Item 6. **Exclude** students who are not formally enrolled for study or dissertation and "special" or unclassified students taking courses at the graduate level but not enrolled for degrees.

Students are to be classified according to citizenship, i.e., **U.S.** citizens (or nationals, e.g., native residents of a possession of the U. S. such as American Samoa), and **foreign** students. Applicants for U. S. citizenship are to be considered as "foreign" until the date their citizenship becomes effective.

A **first-year** graduate student is defined as one who will have completed **less than a full year** of graduate study as of the beginning of the Fall term of 1973. All other students should be considered beyond first year.

Report the number of full-time graduate students in the appropriate column where they receive most of their support. If a graduate student receives stipend support from more than one source, choose the **major** source. For cases of two or more equivalent sources choose one **major** source category so that **using only whole numbers** the departmental data sheet will give a reasonably accurate **average** support picture for the department. Students receiving their **major** support from the Veterans Administration under the G.I. Bill should be reported under column (h), "Other U.S. Government;" if this form of support does not constitute his **major** support, the student should be counted in the appropriate column reflecting that source. Graduate students performing thesis or dissertation research at Government- and contractor-owned facilities are to be included as long as they are considered by the graduate dean as being enrolled for an advanced degree. For instance, graduate students supported by the AEC at Oak Ridge National Laboratory are enrolled for degree-credit at the University of Tennessee, Knoxville, and are to be included in the survey. Please note that support for graduate students by NIH, column (d), should **exclude** support from NIMH, which should be reported under "other, HEW," column (e).

"Institutional Support," column (j), refers to support from "This" institution, as well as from State and local governments. Students who are employees of an organization and whose major support is provided by their employer should be listed under column (l) "Other U.S. Sources." Those receiving most of their support from personal, family, and loan sources should be reported under column (m), "Self, Loans, and Family."

Item 6—The number of graduate students who are working for advanced degrees, but who are not pursuing graduate work full time as defined in Item 5, are enumerated under the entries for **part time.** Part-time graduate students who have completed less than a full year of study in Fall 1973 are counted in column (a), "First Year;" all other part-time students are to be counted under (b), "Beyond First."

Item 7—Under **Postdoctorals** and/or **Research Associates,** include individuals with science or engineering doctorates and M.D.'s (including foreign degrees that are equivalent to U.S. doctorates) who devote **full time** to research activities or study in the department under temporary appointments carrying no academic rank such as instructor or above. Such appointments are usually for a **specific time period.** They may contribute to the academic program through seminars, lectures, or working with graduate students. Their postdoctoral activities have an element of additional training for them. Exclude residents, unless research training under the supervision of a Senior Mentor is the prime purpose of the appointment. Under (a) enter the number of fellows and trainees receiving support under Federal training grants and/or fellowships. Under (b) enter the number of research associates appointed with Federal support. Those remaining appointees with non-Government support are to be entered under (c). Of the total in (d), enter in (e) the number receiving their Ph.D. or M.D. since 1969.

NSF Form 812, Oct. 73

# NATIONAL SCIENCE FOUNDATION

## SURVEY OF GRADUATE SCIENCE STUDENT SUPPORT, FALL 1973

OMB No. 99-R0276

*Approval expires* February 1974

Please return by December 31, 1973

## DEPARTMENTAL DATA SHEET

*(NOTE: Before filling out please read the instructions on the reverse)*

1. Name and address of institution: _____

2. Science or Engineering Department (or unit) covered by this data sheet: a/ _____

3. Person in Department (or unit) preparing this form: Name: _____ Tel: (A/C) _____

4. Highest degree program offered by Department (or unit) in Fall 1973 (CHECK ONE ONLY) Master's ____(1) Doctorate ____(2)

Department Code (Leave Blank) _____

5. Major Support sources (excluding tuition) of ALL FULL-TIME GRADUATE STUDENTS enrolled for Advanced Degrees (M.S. & Ph.D. in the Fall 1973. (see item 5-instructions).

| TYPE OF SUPPORT | CITIZ. & LEVEL | | U.S. GOVERNMENT SOURCE (EXCLUDING LOANS) | | | | | | | | | NON-GOVERNMENT SOURCE | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AEC (a) | DOD (b) | HEW: NDEA (c) | HEW: NIH (d) | HEW: Other HEW (e) | NASA (f) | NSF (g) | Other U.S. Govt. (h) | Total U.S. Govt. (a-h) (i) | Institutional Support b/ (j) | Foreign Sources (k) | Other U.S. Sources c/ (l) | Self, Loans and Family (m) | Total Non-U.S. Govt. (j-m) (n) | Total (i)+(n) (o) |
| Fellowships and Traineeships | U.S. | (1) | | | | | | | | | | | | | | | |
| | Foreign | (2) | | | | | | | | | | | | | | | |
| | Subtotal | (3) | | | | | | | | | | | | | | | |
| Of line (3) How many were: | First Year | (4) | | | | | | | | | | | | | | | |
| | Beyond | (5) | | | | | | | | | | | | | | | |
| Graduate Research Assistantships | U.S. | (6) | | | | | | | | | | | | | | | |
| | Foreign | (7) | | | | | | | | | | | | | | | |
| | Subtotal | (8) | | | | | | | | | | | | | | | |
| Of line (8) How many were: | First Year | (9) | | | | | | | | | | | | | | | |
| | Beyond | (10) | | | | | | | | | | | | | | | |
| Graduate Teaching Assistantships | U.S. | (11) | | | | | | | | | | | | | | | |
| | Foreign | (12) | | | | | | | | | | | | | | | |
| | Subtotal | (13) | | | | | | | | | | | | | | | |
| Of line (13) How many were: | First Year | (14) | | | | | | | | | | | | | | | |
| | Beyond | (15) | | | | | | | | | | | | | | | |
| Other Types of Support | U.S. | (16) | | | | | | | | | | | | | | | |
| | Foreign | (17) | | | | | | | | | | | | | | | |
| | Subtotal | (18) | | | | | | | | | | | | | | | |
| Of line (18) How many were: | First Year | (19) | | | | | | | | | | | | | | | |
| | Beyond | (20) | | | | | | | | | | | | | | | |
| Add Subtotals of lines (3), (8), (13), & (18) All Types, Total | | (21) | | | | | | | | | | | | | | | |
| Of line (21) how many are: Men | First Year | (22) | | | | | | | | | | | | | | | |
| | Beyond | (23) | | | | | | | | | | | | | | | |
| Women | First Year | (24) | | | | | | | | | | | | | | | |
| | Beyond | (25) | | | | | | | | | | | | | | | |

6. PART-TIME GRADUATE STUDENTS enrolled for advanced degrees (do not include "special" students):

| | FALL 1973 |
|---|---|

7. Postdoctorals and/or Research Associates:

| | FALL 1973 | | | |
|---|---|---|---|---|
| | SOURCE of SUPPORT | | TOTAL | Of Col. (d), How many are recent doctorals |
| | U.S. GOVERNMENT | Non-U.S. | | |
| | (a) | (b) | (c) | (d) |

56

429

427

| TYPE OF SUPPORT | CITIZ. & LEVEL | | (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) | (k) | (l) | (m) | (n) | (o) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fellowships and Traineeships | U.S. | (1) | | | | | | | | | | | | | | | |
| | Foreign | (2) | | | | | | | | | | | | | | | |
| | Subtotal | (3) | | | | | | | | | | | | | | | |
| Of line (3) How many were: | First Year | (4) | | | | | | | | | | | | | | | |
| | Beyond | (5) | | | | | | | | | | | | | | | |
| Graduate Research Assistantships | U.S. | (6) | | | | | | | | | | | | | | | |
| | Foreign | (7) | | | | | | | | | | | | | | | |
| | Subtotal | (8) | | | | | | | | | | | | | | | |
| Of line (8) How many were: | First Year | (9) | | | | | | | | | | | | | | | |
| | Beyond | (10) | | | | | | | | | | | | | | | |
| Graduate Teaching Assistantships | U.S. | (11) | | | | | | | | | | | | | | | |
| | Foreign | (12) | | | | | | | | | | | | | | | |
| | Subtotal | (13) | | | | | | | | | | | | | | | |
| Of line (13) How many were: | First Year | (14) | | | | | | | | | | | | | | | |
| | Beyond | (15) | | | | | | | | | | | | | | | |
| Other Types of Support | U.S. | (16) | | | | | | | | | | | | | | | |
| | Foreign | (17) | | | | | | | | | | | | | | | |
| | Subtotal | (18) | | | | | | | | | | | | | | | |
| Of line (18) How many were: | First Year | (19) | | | | | | | | | | | | | | | |
| | Beyond | (20) | | | | | | | | | | | | | | | |
| Add Subtotals of lines (3), (8), (13), & (18) All Types, Total | | (21) | | | | | | | | | | | | | | | |
| Of line (21) how many are: Men | First Year | (22) | | | | | | | | | | | | | | | |
| | Beyond | (23) | | | | | | | | | | | | | | | |
| Women | First Year | (24) | | | | | | | | | | | | | | | |
| | Beyond | (25) | | | | | | | | | | | | | | | |

6. PART-TIME GRADUATE STUDENTS enrolled for advanced degrees (do not include "special" students):

| FALL 1973 | | |
|---|---|---|
| First Year | Beyond First | Total |
| (a) | (b) | (c) |
| | | |

7. Postdoctorals and/or Research Associates:

| FALL 1973 | | | | |
|---|---|---|---|---|
| SOURCE of SUPPORT | | | TOTAL | Of Col. (d), How many are recent doctorals d/ |
| U.S. GOVERNMENT | | Non-U.S. Govt. | | |
| Fellowship/Traineeships | Research Associates | | | |
| (a) | (b) | (c) | (d) | (e) |
| | | | | |

a/ Include basic medical and clinical science departments.

b/ Include institutions and State and local governments.

c/ Include support from nonprofit institutions, industry, and all other U.S. sources.

d/ Since 1969.

**Survey of Graduate Science Student Support, Fall 1973**
**Departmental Data Sheet**

# TABLE IV-1
# SUMMARY OF RESPONSES FROM 6,559 GRADUATE DEPARTMENTS

| Type of support | Citizenship and level | U.S. Government Source (excl. loans) | | | | | | | | | Non-Gove | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | HEW | | | | | | | | | |
| | | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | **Total** | Insti-tutional support[1] | Foreign sources | s |
| Fellowships and traineeships | U.S. | 184 | 327 | 1,643 | 6,906 | 2,985 | 49 | 2,538 | 2,462 | 17,094 | 8,416 | 106 | |
| | Foreign | | 5 | 9 | 182 | 61 | 9 | | 742 | 1,008 | 1,528 | 2,054 | |
| | Subtotal | 184 | 332 | 1,652 | 7,088 | 3,046 | 58 | 2,538 | 3,204 | 18,102 | 9,944 | 2,160 | |
| | First year | 58 | 185 | 152 | 855 | 862 | 18 | 640 | 1,407 | 4,177 | 4,027 | 854 | |
| | Beyond | 126 | 147 | 1,500 | 6,233 | 2,184 | 40 | 1,898 | 1,797 | 13,925 | 5,917 | 1,306 | |
| Graduate research assistantships | U.S. | 1,015 | 1,631 | 33 | 2,288 | 658 | 843 | 4,999 | 3,769 | 15,236 | 9,577 | | |
| | Foreign | 315 | 771 | 4 | 673 | 102 | 307 | 1,922 | 1,334 | 5,428 | 2,521 | 157 | |
| | Subtotal | 1,330 | 2,402 | 37 | 2,961 | 760 | 1,150 | 6,921 | 5,103 | 20,664 | 12,098 | 157 | |
| | First year | 153 | 565 | 7 | 522 | 179 | 285 | 1,189 | 1,258 | 4,168 | 3,837 | 56 | |
| | Beyond | 1,177 | 1,837 | 30 | 2,439 | 581 | 865 | 5,732 | 3,835 | 16,496 | 8,261 | 101 | |
| Graduate teaching assistantships | U.S. | | | | 40 | 66 | | 68 | 88 | 262 | 35,878 | | |
| | Foreign | | | | 10 | 10 | | 19 | 22 | 61 | 6,911 | | |
| | Subtotal | | | | 50 | 76 | | 87 | 110 | 323 | 42,789 | | |
| | First year | | | | 14 | 26 | | 29 | 49 | 118 | 14,217 | | |
| | Beyond | | | | 36 | 50 | | 58 | 61 | 205 | 28,572 | | |
| Other types of support | U.S. | 44 | 1,798 | 9 | 86 | 45 | 27 | 110 | 1,550 | 3,669 | 3,052 | | |
| | Foreign | 4 | 190 | 0 | 12 | 3 | 9 | 26 | 194 | 438 | 565 | 1,343 | |
| | Subtotal | 48 | 1,988 | 9 | 98 | 48 | 36 | 136 | 1,744 | 4,107 | 3,617 | 1,343 | |
| | First year | 21 | 823 | 1 | 35 | 7 | 10 | 48 | 684 | 1,629 | 1,288 | 651 | |
| | Beyond | 27 | 1,165 | 8 | 63 | 41 | 26 | 88 | 1,060 | 2,478 | 2,329 | 692 | |
| **All types, total** | | 1,562 | 4,722 | 1,698 | 10,197 | 3,930 | 1,244 | 9,682 | 10,161 | 43,196 | 68,448 | 3,660 | 1 |
| Men | First year | 216 | 1,531 | 116 | 991 | 664 | 295 | 1,631 | 2,991 | 8,435 | 18,346 | 1,401 | |
| | Beyond | 1,243 | 3,049 | 1,233 | 6,490 | 1,772 | 900 | 6,922 | 5,973 | 27,582 | 36,422 | 1,913 | |
| Women | First year | 16 | 42 | 44 | 435 | 410 | 18 | 275 | 417 | 1,657 | 5,023 | 160 | |
| | Beyond | 87 | 100 | 305 | 2,281 | 1,084 | 31 | 854 | 780 | 5,522 | 8,657 | 186 | |

| Part-time Graduate Students Fall 1973 | | |
|---|---|---|
| First year | Beyond first | Total |
| 20,378 | 33,266 | 53,644 |

| Postdoctorals and/or Research Associates Fall 1973 | | | |
|---|---|---|---|
| Source of support | | | |
| U.S. Government | | | |
| Fellowships/ traineeships | Research associates | Non-U.S. Government | Total |
| 4,595 | 6,691 | 5,072 | 16,358 |

[1] Includes institution's and State and local governments.
[2] Includes support from nonprofit institutions, industry, and all other U.S. sources.
[3] Since 1969.

ence Student Support, Fall 1973
ental Data Sheet

## TABLE IV-1
## SUMMARY OF RESPONSES FROM
## 6,559 GRADUATE DEPARTMENTS

| ip and l | U.S. Government Source (excl. loans) | | | | | | | | | Non-Government Source | | | | | Grand total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | HEW | | | | | | | Insti-tutional support[1] | Foreign sources | Other U.S. sources[2] | Self, loans, and family | Total | |
| | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | | | | | | |
| | 184 | 327 | 1,643 | 6,906 | 2,985 | 49 | 2,538 | 2,462 | 17,094 | 8,416 | 106 | 3,058 | | 11,580 | 28,674 |
| | | 5 | 9 | 182 | 61 | 9 | | 742 | 1,008 | 1,528 | 2,054 | 871 | | 4,453 | 5,461 |
| l | 184 | 332 | 1,652 | 7,088 | 3,046 | 58 | 2,538 | 3,204 | 18,102 | 9,944 | 2,160 | 3,929 | | 16,033 | 34,135 |
| | 58 | 185 | 152 | 855 | 862 | 18 | 640 | 1,407 | 4,177 | 4,027 | 854 | 1,229 | | 6,110 | 10,287 |
| | 126 | 147 | 1,500 | 6,233 | 2,184 | 40 | 1,898 | 1,797 | 13,925 | 5,917 | 1,306 | 2,700 | | 9,923 | 23,848 |
| | 1,015 | 1,631 | 33 | 2,288 | 658 | 843 | 4,999 | 3,769 | 15,236 | 9,577 | | 2,471 | | 12,048 | 27,284 |
| | 315 | 771 | 4 | 673 | 102 | 307 | 1,922 | 1,334 | 5,428 | 2,521 | 157 | 721 | | 3,399 | 8,827 |
| l | 1,330 | 2,402 | 37 | 2,961 | 760 | 1,150 | 6,921 | 5,103 | 20,664 | 12,098 | 157 | 3,192 | | 15,447 | 36,111 |
| | 153 | 565 | 7 | 522 | 179 | 285 | 1,189 | 1,258 | 4,168 | 3,837 | 56 | 1,042 | | 4,935 | 9,103 |
| | 1,177 | 1,837 | 30 | 2,439 | 581 | 865 | 5,732 | 3,835 | 16,496 | 8,261 | 101 | 2,150 | | 10,512 | 27,008 |
| | | | | 40 | 66 | | 68 | 88 | 262 | 35,878 | | 233 | | 36,111 | 36,323 |
| | | | | 10 | 10 | | 19 | 22 | 61 | 6,911 | | 50 | | 6,961 | 7,022 |
| l | | | | 50 | 76 | | 87 | 110 | 323 | 42,789 | | 283 | | 43,072 | 43,395 |
| | | | | 14 | 26 | | 29 | 49 | 118 | 14,217 | | 105 | | 14,322 | 14,440 |
| | | | | 36 | 50 | | 58 | 61 | 205 | 28,572 | | 178 | | 28,750 | 28,955 |
| | 44 | 1,798 | 9 | 86 | 45 | 27 | 110 | 1,550 | 3,669 | 3,052 | | 2,388 | 32,107 | 37,547 | 41,216 |
| | 4 | 190 | 0 | 12 | 3 | 9 | 26 | 194 | 438 | 565 | 1,343 | 327 | 6,788 | 9,023 | 9,461 |
| l | 48 | 1,988 | 9 | 98 | 48 | 36 | 136 | 1,744 | 4,107 | 3,617 | 1,343 | 2,715 | 38,895 | 46,570 | 50,677 |
| | 21 | 823 | 1 | 35 | 7 | 10 | 48 | 684 | 1,629 | 1,288 | 651 | 893 | 17,555 | 20,387 | 22,016 |
| | 27 | 1,165 | 8 | 63 | 41 | 26 | 88 | 1,060 | 2,478 | 2,329 | 692 | 1,822 | 21,340 | 26,183 | 28,661 |
| | 1,562 | 4,722 | 1,698 | 10,197 | 3,930 | 1,244 | 9,682 | 10,161 | 43,196 | 68,448 | 3,660 | 10,119 | 38,895 | 121,122 | 164,318 |
| | 216 | 1,531 | 116 | 991 | 664 | 295 | 1,631 | 2,991 | 8,435 | 18,346 | 1,401 | 2,736 | 13,394 | 35,877 | 44,312 |
| | 1,243 | 3,049 | 1,233 | 6,490 | 1,772 | 900 | 6,922 | 5,973 | 27,582 | 36,422 | 1,913 | 5,744 | 16,623 | 60,702 | 88,284 |
| | 16 | 42 | 44 | 435 | 410 | 18 | 275 | 417 | 1,657 | 5,023 | 160 | 533 | 4,161 | 9,877 | 11,534 |
| | 87 | 100 | 305 | 2,281 | 1,084 | 31 | 854 | 780 | 5,522 | 8,657 | 186 | 1,106 | 4,717 | 14,666 | 20,188 |

| time Graduate Students<br>Fall 1973 | |
|---|---|
| Beyond first | Total |
| 33,266 | 53,644 |

his.
y, and all other U.S. sources.

| Postdoctorals and/or Research Associates<br>Fall 1973 | | | | |
|---|---|---|---|---|
| Source of support | | | | |
| U.S. Government | | | | |
| Fellowships/ traineeships | Research associates | Non-U.S. Government | Total | Recent doctorals[3] |
| 4,595 | 6,691 | 5,072 | 16,358 | 9,612 |

**Survey of Graduate Science Student Support, Fall 1973**
**Departmental Data Sheet**

**TABLE IV-2**
**SUMMARY OF RESPONSES FROM 926**
**DEPARTMENTS IN ENGINEER**

| Type of support | Citizenship and level | U.S. Government Source (excl. loans) | | | | | | | | | Non-G | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | HEW | | | | | | | | |
| | | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | Institutional support[1] | Foreig source |
| Fellowships and traineeships | U.S. | 124 | 162 | 189 | 351 | 179 | 20 | 412 | 695 | 2,132 | 1,090 | 13 |
| | Foreign | | 3 | 1 | 21 | 6 | 2 | | 95 | 128 | 368 | 509 |
| | Subtotal | 124 | 165 | 190 | 372 | 185 | 22 | 412 | 790 | 2,260 | 1,458 | 522 |
| | First year | 55 | 108 | 13 | 45 | 124 | 10 | 142 | 538 | 1,035 | 773 | 238 |
| | Beyond | 69 | 57 | 177 | 327 | 61 | 12 | 270 | 252 | 1,225 | 685 | 284 |
| Graduate research assistantships | U.S. | 224 | 853 | 7 | 197 | 52 | 309 | 1,159 | 911 | 3,712 | 1,616 | |
| | Foreign | 134 | 564 | 1 | 99 | 33 | 218 | 987 | 729 | 2,765 | 951 | 27 |
| | Subtotal | 358 | 1,417 | 8 | 296 | 85 | 527 | 2,146 | 1,640 | 6,477 | 2,567 | 27 |
| | First year | 83 | 437 | 0 | 66 | 25 | 163 | 565 | 454 | 1,793 | 981 | 9 |
| | Beyond | 275 | 980 | 8 | 230 | 60 | 364 | 1,581 | 1,186 | 4,684 | 1,586 | 18 |
| Graduate teaching assistantships | U.S. | | | | 4 | 6 | | 9 | 21 | 40 | 3,242 | |
| | Foreign | | | | 8 | 0 | | 7 | 7 | 22 | 1,598 | |
| | Subtotal | | | | 12 | 6 | | 16 | 28 | 62 | 4,840 | |
| | First year | | | | 4 | 2 | | 8 | 14 | 28 | 2,035 | |
| | Beyond | | | | 8 | 4 | | 8 | 14 | 34 | 2,805 | |
| Other types of support | U.S. | 34 | 1,144 | 0 | 2 | 6 | 8 | 10 | 533 | 1,737 | 446 | |
| | Foreign | 4 | 161 | 0 | 0 | 0 | 7 | 9 | 42 | 223 | 202 | 587 |
| | Subtotal | 38 | 1,305 | 0 | 2 | 6 | 15 | 19 | 575 | 1,960 | 648 | 587 |
| | First year | 19 | 530 | 0 | 0 | 1 | 3 | 9 | 252 | 814 | 313 | 328 |
| | Beyond | 19 | 775 | 0 | 2 | 5 | 12 | 10 | 323 | 1,146 | 335 | 259 |
| **All types, total** | | 520 | 2,887 | 198 | 682 | 282 | 564 | 2,593 | 3,033 | 10,759 | 9,513 | 1,136 |
| Men | First year | 150 | 1,058 | 11 | 106 | 143 | 171 | 703 | 1,218 | 3,560 | 3,956 | 563 |
| | Beyond | 355 | 1,792 | 181 | 538 | 123 | 384 | 1,824 | 1,729 | 6,926 | 5,274 | 545 |
| Women | First year | 7 | 17 | 2 | 9 | 9 | 5 | 21 | 40 | 110 | 146 | 12 |
| | Beyond | 8 | 20 | 4 | 29 | 7 | 4 | 45 | 46 | 163 | 137 | 16 |

| Part-time Graduate Students Fall 1973 | | |
|---|---|---|
| First year | Beyond first | Total |
| 9,645 | 10,904 | 20,549 |

| Postdoctorals and/or Research Assoc Fall 1973 | | | |
|---|---|---|---|
| Source of support | | | |
| U.S. Government | | | |
| Fellowships/ traineeships | Research associates | Non-U.S. Government | T |
| 104 | 617 | 254 | 9 |

[1] Includes institution's and State and local governments.
[2] Includes support from nonprofit institutions, industry, and all other U.S. sources.
[3] Since 1969.

...nce Student Support, Fall 1973
...ental Data Sheet

## TABLE IV-2
## SUMMARY OF RESPONSES FROM 926 GRADUATE DEPARTMENTS IN ENGINEERING

| ...p and | U.S. Government Source (excl. loans) | | | | | | | | | Non-Government Source | | | | | Grand total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | HEW | | | | | | | Insti-tutional support[1] | Foreign sources | Other U.S. sources[2] | Self, loans, and family | Total | |
| | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | | | | | | |
| ..... | 124 | 162 | 189 | 351 | 179 | 20 | 412 | 695 | 2,132 | 1,090 | 13 | 728 | | 1,831 | 3,963 |
| ..... | | 3 | 1 | 21 | 6 | 2 | | 95 | 128 | 368 | 509 | 179 | | 1,056 | 1,184 |
| ..... | 124 | 165 | 190 | 372 | 185 | 22 | 412 | 790 | 2,260 | 1,458 | 522 | 907 | | 2,887 | 5,147 |
| ..... | 55 | 108 | 13 | 45 | 124 | 10 | 142 | 538 | 1,035 | 773 | 238 | 393 | | 1,404 | 2,439 |
| ..... | 69 | 57 | 177 | 327 | 61 | 12 | 270 | 252 | 1,225 | 685 | 284 | 514 | | 1,483 | 2,708 |
| ..... | 224 | 853 | 7 | 197 | 52 | 309 | 1,159 | 911 | 3,712 | 1,616 | | 838 | | 2,454 | 6,166 |
| ..... | 134 | 564 | 1 | 99 | 33 | 218 | 987 | 729 | 2,765 | 951 | 27 | 405 | | 1,383 | 4,148 |
| ..... | 358 | 1,417 | 8 | 296 | 85 | 527 | 2,146 | 1,640 | 6,477 | 2,567 | 27 | 1,243 | | 3,837 | 10,314 |
| ..... | 83 | 437 | 0 | 66 | 25 | 163 | 565 | 454 | 1,793 | 981 | 9 | 470 | | 1,460 | 3,253 |
| ..... | 275 | 980 | 8 | 230 | 60 | 364 | 1,581 | 1,186 | 4,684 | 1,586 | 18 | 773 | | 2,377 | 7,061 |
| ..... | | | | 4 | 6 | | 9 | 21 | 40 | 3,242 | | 41 | | 3,283 | 3,323 |
| ..... | | | | 8 | 0 | | 7 | 7 | 22 | 1,598 | | 33 | | 1,631 | 1,653 |
| ..... | | | | 12 | 6 | | 16 | 28 | 62 | 4,840 | | 74 | | 4,914 | 4,976 |
| ..... | | | | 4 | 2 | | 8 | 14 | 28 | 2,035 | | 24 | | 2,059 | 2,087 |
| ..... | | | | 8 | 4 | | 8 | 14 | 34 | 2,805 | | 50 | | 2,855 | 2,889 |
| ..... | 34 | 1,144 | 0 | 2 | 6 | 8 | 10 | 533 | 1,737 | 446 | | 539 | 4,675 | 5,660 | 7,397 |
| ..... | 4 | 161 | 0 | 0 | 0 | 7 | 9 | 42 | 223 | 202 | 587 | 95 | 2,761 | 3,645 | 3,868 |
| ..... | 38 | 1,305 | 0 | 2 | 6 | 15 | 19 | 575 | 1,960 | 648 | 587 | 634 | 7,436 | 9,305 | 11,265 |
| ..... | 19 | 530 | 0 | 0 | 1 | 3 | 9 | 252 | 814 | 313 | 328 | 341 | 3,960 | 4,942 | 5,756 |
| ..... | 19 | 775 | 0 | 2 | 5 | 12 | 10 | 323 | 1,146 | 335 | 259 | 293 | 3,476 | 4,363 | 5,509 |
| ..... | 520 | 2,887 | 198 | 682 | 282 | 564 | 2,593 | 3,033 | 10,759 | 9,513 | 1,136 | 2,858 | 7,436 | 20943 | 3,1702 |
| ..... | 150 | 1,058 | 11 | 106 | 143 | 171 | 703 | 1,218 | 3,560 | 3,956 | 563 | 1,188 | 3,786 | 9,493 | 13,053 |
| ..... | 355 | 1,792 | 181 | 538 | 123 | 384 | 1,824 | 1,729 | 6,926 | 5,274 | 545 | 1,592 | 3,343 | 10,754 | 17,680 |
| ..... | 7 | 17 | 2 | 9 | 9 | 5 | 21 | 40 | 110 | 146 | 12 | 40 | 174 | 372 | 482 |
| ..... | 8 | 20 | 4 | 29 | 7 | 4 | 45 | 46 | 163 | 137 | 16 | 38 | 133 | 324 | 487 |

| ...me Graduate Students Fall 1973 | |
|---|---|
| Beyond first | Total |
| 10,904 | 20,549 |

...and all other U.S. sources

| Postdoctorals and/or Research Associates Fall 1973 | | | | |
|---|---|---|---|---|
| Source of support | | | | |
| U.S. Government | | | | |
| Fellowships/ traineeships | Research associates | Non-U.S. Government | Total | Recent doctorals[3] |
| 104 | 617 | 254 | 975 | 616 |

**Survey of Graduate Science Student Support, Fall 1973**
**Departmental Data Sheet**

**TABLE IV-3**
**SUMMARY OF RESPONSES FROM 713 G**
**DEPARTMENTS IN THE PHYSICAL SC**

| Type of support | Citizenship and level | U.S. Government Source (excl. loans) | | | | | | | | | Non-Go | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | HEW | | | | | | | | |
| | | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | Institutional support[1] | Foreign sources |
| Fellowships and traineeships | U.S. | 24 | 30 | 292 | 212 | 15 | 5 | 549 | 153 | 1,280 | 1,188 | 20 |
| | Foreign | | 0 | 0 | 11 | 1 | 3 | | 33 | 48 | 252 | 245 |
| | Subtotal | 24 | 30 | 292 | 223 | 16 | 8 | 549 | 186 | 1,328 | 1,440 | 265 |
| | First year | 1 | 11 | 13 | 4 | 3 | 1 | 124 | 79 | 236 | 546 | 94 |
| | Beyond | 23 | 19 | 279 | 219 | 13 | 7 | 425 | 107 | 1,092 | 894 | 171 |
| Graduate research assistantships | U.S. | 695 | 533 | 7 | 513 | 49 | 467 | 2,623 | 694 | 5,581 | 1,144 | |
| | Foreign | 149 | 145 | 0 | 160 | 13 | 80 | 674 | 137 | 1,358 | 305 | 25 |
| | Subtotal | 844 | 678 | 7 | 673 | 62 | 547 | 3,297 | 831 | 6,939 | 1,449 | 25 |
| | First year | 53 | 66 | 0 | 24 | 13 | 92 | 310 | 119 | 677 | 247 | 7 |
| | Beyond | 791 | 612 | 7 | 649 | 49 | 455 | 2,987 | 712 | 6,262 | 1,202 | 18 |
| Graduate teaching assistantships | U.S. | | | | 0 | 3 | | 11 | 2 | 16 | 9,286 | |
| | Foreign | | | | 0 | 0 | | 4 | 1 | 5 | 2,428 | |
| | Subtotal | | | | 0 | 3 | | 15 | 3 | 21 | 11,714 | |
| | First year | | | | 0 | 0 | | 6 | 1 | 7 | 4,298 | |
| | Beyond | | | | 0 | 3 | | 9 | 2 | 14 | 7,416 | |
| Other types of support | U.S. | 7 | 285 | 0 | 3 | 2 | 18 | 28 | 246 | 589 | 262 | |
| | Foreign | 0 | 10 | 0 | 0 | 0 | 2 | 4 | 2 | 18 | 61 | 123 |
| | Subtotal | 7 | 295 | 0 | 3 | 2 | 20 | 32 | 248 | 607 | 323 | 123 |
| | First year | 1 | 101 | 0 | 0 | 1 | 6 | 3 | 71 | 183 | 102 | 39 |
| | Beyond | 6 | 194 | 0 | 3 | 1 | 14 | 29 | 177 | 424 | 221 | 84 |
| **All types, total** | | 875 | 1,003 | 299 | 899 | 83 | 575 | 3,893 | 1,268 | 8,895 | 14,926 | 413 |
| Men | First year | 48 | 168 | 10 | 21 | 16 | 95 | 394 | 251 | 1,003 | 4,468 | 124 |
| | Beyond | 775 | 778 | 249 | 754 | 57 | 454 | 3,175 | 924 | 7,166 | 8,511 | 259 |
| Women | First year | 7 | 10 | 3 | 7 | 1 | 4 | 49 | 19 | 100 | 725 | 16 |
| | Beyond | 45 | 47 | 37 | 117 | 9 | 22 | 275 | 74 | 626 | 1,222 | 14 |

| Part-time Graduate Students Fall 1973 | | |
|---|---|---|
| First year | Beyond first | Total |
| 1,084 | 3,424 | 4,508 |

| Postdoctorals and/or Research Associat Fall 1973 | | | |
|---|---|---|---|
| Source of support | | | |
| U.S. Government | | | |
| Fellowships/ traineeships | Research associates | Non-U.S. Government | Tota |
| 490 | 2,688 | 945 | 4,123 |

[1] Includes institution's and State and local governments.
[2] Includes support from nonprofit institutions, industry, and all other U.S. sources.
[3] Since 1969

...ce Student Support, Fall 1973
...ntal Data Sheet

## TABLE IV-3
## SUMMARY OF RESPONSES FROM 713 GRADUATE DEPARTMENTS IN THE PHYSICAL SCIENCES

| ... and | U.S. Government Source (excl. loans) | | | | | | | | | Non-Government Source | | | | | Grand total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | HEW | | | | | | | | | | | | |
| | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | Institutional support[1] | Foreign sources | Other U.S. sources[2] | Self, loans, and family | Total | |
| ..... | 24 | 30 | 292 | 212 | 15 | 5 | 549 | 153 | 1,280 | 1,188 | 20 | 473 | | 1,681 | 2,961 |
| ..... | | 0 | 0 | 11 | 1 | 3 | | 33 | 48 | 252 | 245 | 88 | | 585 | 633 |
| ..... | 24 | 30 | 292 | 223 | 16 | 8 | 549 | 186 | 1,328 | 1,440 | 265 | 561 | | 2,266 | 3,594 |
| ..... | 1 | 11 | 13 | 4 | 3 | 1 | 124 | 79 | 236 | 546 | 94 | 112 | | 752 | 988 |
| ..... | 23 | 19 | 279 | 219 | 13 | 7 | 425 | 107 | 1,092 | 894 | 171 | 449 | | 1,514 | 2,606 |
| ..... | 695 | 533 | 7 | 513 | 49 | 467 | 2,623 | 694 | 5,581 | 1,144 | | 398 | | 1,542 | 7,123 |
| ..... | 149 | 145 | 0 | 160 | 13 | 80 | 674 | 137 | 1,358 | 305 | 25 | 67 | | 397 | 1,755 |
| ..... | 844 | 678 | 7 | 673 | 62 | 547 | 3,297 | 831 | 6,939 | 1,449 | 25 | 465 | | 1,939 | 8,878 |
| ..... | 53 | 66 | 0 | 24 | 13 | 92 | 310 | 119 | 677 | 247 | 7 | 79 | | 333 | 1,010 |
| ..... | 791 | 612 | 7 | 649 | 49 | 455 | 2,987 | 712 | 6,262 | 1,202 | 18 | 386 | | 1,606 | 7,868 |
| ..... | | | | 0 | 3 | | 11 | 2 | 16 | 9,286 | | 41 | | 9,327 | 9,343 |
| ..... | | | | 0 | 0 | | 4 | 1 | 5 | 2,428 | | 4 | | 2,432 | 2,437 |
| ..... | | | | 0 | 3 | | 15 | 3 | 21 | 11,714 | | 45 | | 11,759 | 11,780 |
| ..... | | | | 0 | 0 | | 6 | 1 | 7 | 4,298 | | 24 | | 4,322 | 4,329 |
| ..... | | | | 0 | 3 | | 9 | 2 | 14 | 7,416 | | 21 | | 7,437 | 7,451 |
| ..... | 7 | 285 | 0 | 3 | 2 | 18 | 28 | 246 | 589 | 262 | | 182 | 2,482 | 2,926 | 3,515 |
| ..... | 0 | 10 | 0 | 0 | 0 | 2 | 4 | 2 | 18 | 61 | 123 | 15 | 481 | 680 | 698 |
| ..... | 7 | 295 | 0 | 3 | 2 | 20 | 32 | 248 | 607 | 323 | 123 | 197 | 2,963 | 3,606 | 4,213 |
| ..... | 1 | 101 | 0 | 0 | 1 | 6 | 3 | 71 | 183 | 102 | 39 | 57 | 1,018 | 1,216 | 1,399 |
| ..... | 6 | 194 | 0 | 3 | 1 | 14 | 29 | 177 | 424 | 221 | 84 | 140 | 1,945 | 2,390 | 2,814 |
| ..... | 875 | 1,003 | 299 | 899 | 83 | 575 | 3,893 | 1,268 | 8,895 | 14,926 | 413 | 1,268 | 2,963 | 19,570 | 28,465 |
| ..... | 48 | 168 | 10 | 21 | 16 | 95 | 394 | 251 | 1,003 | 4,468 | 124 | 245 | 885 | 5,722 | 6,725 |
| ..... | 775 | 778 | 249 | 754 | 57 | 454 | 3,175 | 924 | 7,166 | 8,511 | 259 | 908 | 1,729 | 11,407 | 18,573 |
| ..... | 7 | 10 | 3 | 7 | 1 | 4 | 49 | 19 | 100 | 725 | 16 | 27 | 133 | 901 | 1,001 |
| ..... | 45 | 47 | 37 | 117 | 9 | 22 | 275 | 74 | 626 | 1,222 | 14 | 88 | 216 | 1,540 | 2,166 |

| ...e Graduate Students Fall 1973 | |
|---|---|
| Beyond first | Total |
| 3,424 | 4,508 |

| Postdoctorals and/or Research Associates Fall 1973 | | | | |
|---|---|---|---|---|
| Source of support | | | | |
| U.S. Government | | | | |
| Fellowships/ traineeships | Research associates | Non-U.S. Government | Total | Recent doctorals[3] |
| 490 | 2,688 | 945 | 4,123 | 2,850 |

...nd all other U.S. sources

**Survey of Graduate Science Student Support, Fall 1973**
**Departmental Data Sheet**

**TABLE IV-4**
**SUMMARY OF RESPONSES FROM 339**
**DEPARTMENTS IN THE MATHEMATICA**

| Type of support | Citizenship and level | U.S. Government Source (excl. loans) | | | | | | | | | Non-G | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | HEW | | | | | | | | |
| | | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | Institutional support[1] | Foreig source |
| Fellowships and traineeships | U.S. | 0 | 21 | 110 | 67 | 9 | 2 | 337 | 37 | 583 | 533 | 6 |
| | Foreign | | 1 | 0 | 1 | 0 | 0 | | 10 | 12 | 131 | 146 |
| | Subtotal | 0 | 22 | 110 | 68 | 9 | 2 | 337 | 47 | 595 | 664 | 152 |
| | First year | 0 | 12 | 7 | 6 | 1 | 0 | 99 | 15 | 140 | 291 | 55 |
| | Beyond | 0 | 10 | 103 | 62 | 8 | 2 | 238 | 32 | 455 | 373 | 97 |
| Graduate research assistantships | U.S. | 25 | 142 | 1 | 39 | 4 | 5 | 294 | 79 | 589 | 344 | |
| | Foreign | 12 | 44 | 0 | 8 | 1 | 2 | 99 | 31 | 197 | 115 | 2 |
| | Subtotal | 37 | 186 | 1 | 47 | 5 | 7 | 393 | 110 | 786 | 459 | 2 |
| | First year | 3 | 37 | 0 | 14 | 1 | 4 | 87 | 19 | 165 | 125 | 1 |
| | Beyond | 34 | 149 | 1 | 33 | 4 | 3 | 306 | 91 | 621 | 334 | 1 |
| Graduate teaching assistantships | U.S. | | | | 1 | 0 | | 20 | 5 | 26 | 5,136 | |
| | Foreign | | | | 0 | 0 | | 6 | 0 | 6 | 1,017 | |
| | Subtotal | | | | 1 | 0 | | 26 | 5 | 32 | 6,153 | |
| | First year | | | | 0 | 0 | | 9 | 1 | 10 | 1,922 | |
| | Beyond | | | | 1 | 0 | | 17 | 4 | 22 | 4,231 | |
| Other types of support | U.S. | 0 | 135 | 0 | 1 | 0 | 1 | 16 | 91 | 244 | 191 | |
| | Foreign | 0 | 19 | 0 | 0 | 0 | 0 | 5 | 11 | 35 | 70 | 86 |
| | Subtotal | 0 | 154 | 0 | 1 | 0 | 1 | 21 | 102 | 279 | 261 | 86 |
| | First year | 0 | 77 | 0 | 0 | 0 | 1 | 11 | 54 | 143 | 79 | 38 |
| | Beyond | 0 | 77 | 0 | 1 | 0 | 0 | 10 | 48 | 136 | 182 | 48 |
| **All types, total** | | 37 | 362 | 111 | 117 | 14 | 10 | 777 | 264 | 1,692 | 7,537 | 240 |
| Men | First year | 3 | 123 | 5 | 16 | 2 | 3 | 149 | 79 | 380 | 1,848 | 76 |
| | Beyond | 29 | 223 | 90 | 83 | 9 | 5 | 517 | 152 | 1,108 | 4,197 | 126 |
| Women | First year | 0 | 3 | 2 | 4 | 0 | 2 | 57 | 10 | 78 | 569 | 18 |
| | Beyond | 5 | 13 | 14 | 14 | 3 | 0 | 54 | 23 | 126 | 923 | 20 |

| Part-time Graduate Students Fall 1973 | | |
|---|---|---|
| First year | Beyond first | Total |
| 2,626 | 3,147 | 5,773 |

| Postdoctorals and/or Research Assoc Fall 1973 | | | |
|---|---|---|---|
| Source of support | | | |
| U.S. Government | | Non-U.S. Government | T |
| Fellowships/ traineeships | Research associates | | |
| 32 | 62 | 51 | 1 |

[1] Includes institution's and State and local governments.
[2] Includes support from nonprofit institutions, industry, and all other U.S. sources.
[3] Since 1969.

ience Student Support, Fall 1973
mental Data Sheet

## TABLE IV-4
## SUMMARY OF RESPONSES FROM 339 GRADUATE DEPARTMENTS IN THE MATHEMATICAL SCIENCES

| ship and vel | U.S. Government Source (excl. loans) | | | | | | | | | Non-Government Source | | | | | Grand total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | HEW | | | | | | | Insti-tutional support[1] | Foreign sources | Other U.S. sources[2] | Self, loans, and family | Total | |
| | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | | | | | | |
| | 0 | 21 | 110 | 67 | 9 | 2 | 337 | 37 | 583 | 533 | 6 | 107 | | 646 | 1,229 |
| | | 1 | 0 | 1 | 0 | 0 | | 10 | 12 | 131 | 146 | 21 | | 298 | 310 |
| tal | 0 | 22 | 110 | 68 | 9 | 2 | 337 | 47 | 595 | 664 | 152 | 128 | | 944 | 1,539 |
| | 0 | 12 | 7 | 6 | 1 | 0 | 99 | 15 | 140 | 291 | 55 | 36 | | 382 | 522 |
| | 0 | 10 | 103 | 62 | 8 | 2 | 238 | 32 | 455 | 373 | 97 | 92 | | 562 | 1,017 |
| | 25 | 142 | 1 | 39 | 4 | 5 | 294 | 79 | 589 | 344 | | 17 | | 361 | 950 |
| | 12 | 44 | 0 | 8 | 1 | 2 | 99 | 31 | 197 | 115 | 2 | 12 | | 129 | 326 |
| tal | 37 | 186 | 1 | 47 | 5 | 7 | 393 | 110 | 786 | 459 | 2 | 29 | | 490 | 1,276 |
| | 3 | 37 | 0 | 14 | 1 | 4 | 87 | 19 | 165 | 125 | 1 | 9 | | 135 | 300 |
| | 34 | 149 | 1 | 33 | 4 | 3 | 306 | 91 | 621 | 334 | 1 | 20 | | 355 | 976 |
| | | | | 1 | 0 | | 20 | 5 | 26 | 5,136 | | 16 | | 5,152 | 5,178 |
| | | | | 0 | 0 | | 6 | 0 | 6 | 1,017 | | 1 | | 1,018 | 1,024 |
| tal | | | | 1 | 0 | | 26 | 5 | 32 | 6,153 | | 17 | | 6,170 | 6,202 |
| | | | | 0 | 0 | | 9 | 1 | 10 | 1,922 | | 7 | | 1,929 | 1,939 |
| | | | | 1 | 0 | | 17 | 4 | 22 | 4,231 | | 10 | | 4,241 | 4,263 |
| | 0 | 135 | 0 | 1 | 0 | 1 | 16 | 91 | 244 | 191 | | 277 | 2,242 | 2,710 | 2,954 |
| | 0 | 19 | 0 | 0 | 0 | 0 | 5 | 11 | 35 | 70 | 86 | 49 | 551 | 756 | 791 |
| tal | 0 | 154 | 0 | 1 | 0 | 1 | 21 | 102 | 279 | 261 | 86 | 326 | 2,793 | 3,466 | 3,745 |
| | 0 | 77 | 0 | 0 | 0 | 1 | 11 | 54 | 143 | 79 | 38 | 112 | 1,262 | 1,491 | 1,634 |
| | 0 | 77 | 0 | 1 | 0 | 0 | 10 | 48 | 136 | 182 | 48 | 214 | 1,531 | 1,975 | 2,111 |
| | 37 | 362 | 111 | 117 | 14 | 10 | 777 | 264 | 1,692 | 7,537 | 240 | 500 | 2,793 | 11,070 | 12,762 |
| | 3 | 123 | 5 | 16 | 2 | 3 | 149 | 79 | 380 | 1,848 | 76 | 131 | 980 | 3,035 | 3,415 |
| | 29 | 223 | 90 | 83 | 9 | 5 | 517 | 152 | 1,108 | 4,197 | 126 | 286 | 1,236 | 5,845 | 6,953 |
| | 0 | 3 | 2 | 4 | 0 | 2 | 57 | 10 | 78 | 569 | 18 | 33 | 282 | 902 | 980 |
| | 5 | 13 | 14 | 14 | 3 | 0 | 54 | 23 | 126 | 923 | 20 | 50 | 295 | 1,288 | 1,414 |

| t-time Graduate Students Fall 1973 | | |
|---|---|---|
| ar | Beyond first | Total |
| | 3,147 | 5,773 |

ents.
stry, and all other U.S. sources.

| Postdoctorals and/or Research Associates Fall 1973 | | | | |
|---|---|---|---|---|
| Source of support | | | | |
| U.S. Government | | | | |
| Fellowships/ traineeships | Research associates | Non-U.S. Government | Total | Recent doctorals[3] |
| 32 | 62 | 51 | 145 | 82 |

**Survey of Graduate Science Student Support, Fall 1973**
**Departmental Data Sheet**

**TABLE IV-5**
**SUMMARY OF RESPONSES FROM 3,422 D**
**DEPARTMENTS IN THE LIFE SCIEN**

| Type of support | Citizenship and level | U.S. Government Source (excl. loans) | | | | | | | | | Non-Gov | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | AEC | DOD | HEW NDEA | HEW NIH | HEW Other | NASA | NSF | Other | Total | Institutional support[1] | Foreign sources |
| Fellowships and traineeships | U.S. | 32 | 54 | 306 | 4,955 | 933 | 18 | 520 | 546 | 7,364 | 2,116 | 25 |
| | Foreign | | 0 | 0 | 137 | 25 | 4 | | 254 | 420 | 321 | 637 |
| | Subtotal | 32 | 54 | 306 | 5,092 | 958 | 22 | 520 | 800 | 7,784 | 2,437 | 662 |
| | First year | 1 | 24 | 19 | 560 | 243 | 5 | 108 | 309 | 1,269 | 983 | 277 |
| | Beyond | 31 | 30 | 287 | 4,532 | 715 | 17 | 412 | 491 | 6,515 | 1,454 | 385 |
| Graduate research assistantships | U.S. | 70 | 38 | 14 | 1,273 | 122 | 47 | 539 | 1,440 | 3,543 | 3,370 | |
| | Foreign | 20 | 13 | 1 | 370 | 28 | 4 | 93 | 286 | 815 | 702 | 94 |
| | Subtotal | 90 | 51 | 15 | 1,643 | 150 | 51 | 632 | 1,726 | 4,358 | 4,072 | 94 |
| | First year | 14 | 9 | 4 | 340 | 42 | 20 | 140 | 445 | 1,014 | 1,216 | 36 |
| | Beyond | 76 | 42 | 11 | 1,303 | 108 | 31 | 492 | 1,281 | 3,344 | 2,856 | 58 |
| Graduate teaching assistantships | U.S. | | | | 34 | 18 | | 19 | 27 | 98 | 7,972 | |
| | Foreign | | | | 2 | 8 | | 0 | 10 | 20 | 827 | |
| | Subtotal | | | | 36 | 26 | | 19 | 37 | 118 | 8,799 | |
| | First year | | | | 10 | 16 | | 6 | 13 | 45 | 2,923 | |
| | Beyond | | | | 26 | 10 | | 13 | 24 | 73 | 5,876 | |
| Other types of support | U.S. | 3 | 10 | 4 | 66 | 10 | 0 | 28 | 182 | 303 | 673 | |
| | Foreign | 0 | 0 | 0 | 12 | 2 | 0 | 5 | 62 | 81 | 112 | 341 |
| | Subtotal | 3 | 10 | 4 | 78 | 12 | 0 | 33 | 244 | 384 | 785 | 341 |
| | First year | 1 | 2 | 0 | 31 | 4 | 0 | 23 | 94 | 155 | 319 | 143 |
| | Beyond | 2 | 8 | 4 | 47 | 8 | 0 | 10 | 150 | 229 | 466 | 198 |
| **All types, total** | | 125 | 115 | 325 | 6,849 | 1,146 | 73 | 1,204 | 2,807 | 12,644 | 16,093 | 1,097 |
| Men | First year | 14 | 33 | 15 | 658 | 170 | 20 | 220 | 730 | 1,860 | 3,894 | 396 |
| | Beyond | 81 | 75 | 228 | 4,281 | 470 | 43 | 714 | 1,717 | 7,609 | 8,220 | 573 |
| Women | First year | 2 | 2 | 8 | 283 | 135 | 5 | 57 | 131 | 623 | 1,547 | 60 |
| | Beyond | 28 | 5 | 74 | 1,627 | 371 | 5 | 213 | 229 | 2,552 | 2,432 | 68 |

| Part-time Graduate Students Fall 1973 | | |
|---|---|---|
| First year | Beyond first | Total |
| 2,376 | 4,217 | 6,593 |

| Postdoctorals and/or Research Associate Fall 1973 | | | |
|---|---|---|---|
| Source of support | | | |
| U.S. Government | | | |
| Fellowships/ traineeships | Research associates | Non-U.S. Government | Total |
| 3,858 | 3,140 | 3,522 | 10,520 |

[1] Includes institution's and State and local governments.
[2] Includes support from nonprofit institutions, industry, and all other U.S. sources.
[3] Since 1969

e Student Support, Fall 1973
al Data Sheet

## TABLE IV-5
## SUMMARY OF RESPONSES FROM 3,422 GRADUATE DEPARTMENTS IN THE LIFE SCIENCES

| nd | U.S. Government Source (excl. loans) | | | | | | | | | Non-Government Source | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | HEW | | | | | | | | | | | | |
| | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | Institutional support[1] | Foreign sources | Other U.S. sources[2] | Self, loans, and family | Total | Grand total |
| ..... | 32 | 54 | 306 | 4,955 | 933 | 18 | 520 | 546 | 7,364 | 2,116 | 25 | 612 | | 2,753 | 10,117 |
| ..... | | 0 | 0 | 137 | 25 | 4 | | 254 | 420 | 321 | 637 | 237 | | 1,195 | 1,615 |
| ..... | 32 | 54 | 306 | 5,092 | 958 | 22 | 520 | 800 | 7,784 | 2,437 | 662 | 849 | | 3,948 | 11,732 |
| ..... | 1 | 24 | 19 | 560 | 243 | 5 | 108 | 309 | 1,269 | 983 | 277 | 271 | | 1,531 | 2,800 |
| ..... | 31 | 30 | 287 | 4,532 | 715 | 17 | 412 | 491 | 6,515 | 1,454 | 385 | 578 | | 2,417 | 8,932 |
| ..... | 70 | 38 | 14 | 1,273 | 122 | 47 | 539 | 1,440 | 3,543 | 3,370 | | 859 | | 4,229 | 7,772 |
| ..... | 20 | 13 | 1 | 370 | 28 | 4 | 93 | 286 | 815 | 702 | 94 | 173 | | 969 | 1,784 |
| ..... | 90 | 51 | 15 | 1,643 | 150 | 51 | 632 | 1,726 | 4,358 | 4,072 | 94 | 1,032 | | 5,198 | 9,556 |
| ..... | 14 | 9 | 4 | 340 | 42 | 20 | 140 | 445 | 1,014 | 1,216 | 36 | 319 | | 1,571 | 2,585 |
| ..... | 76 | 42 | 11 | 1,303 | 108 | 31 | 492 | 1,281 | 3,344 | 2,856 | 58 | 713 | | 3,627 | 6,971 |
| ..... | | | | 34 | 18 | | 19 | 27 | 98 | 7,972 | | 69 | | 8,041 | 8,139 |
| ..... | | | | 2 | 8 | | 0 | 10 | 20 | 827 | | 10 | | 837 | 857 |
| ..... | | | | 36 | 26 | | 19 | 37 | 118 | 8,799 | | 79 | | 8,878 | 8,996 |
| ..... | | | | 10 | 16 | | 6 | 13 | 45 | 2,923 | | 33 | | 2,956 | 3,001 |
| ..... | | | | 26 | 10 | | 13 | 24 | 73 | 5,876 | | 46 | | 5,922 | 5,995 |
| ..... | 3 | 10 | 4 | 66 | 10 | 0 | 28 | 182 | 303 | 673 | | 398 | 7,708 | 8,779 | 9,082 |
| ..... | 0 | 0 | 0 | 12 | 2 | 0 | 5 | 62 | 81 | 112 | 341 | 117 | 1,004 | 1,574 | 1,655 |
| ..... | 3 | 10 | 4 | 78 | 12 | 0 | 33 | 244 | 384 | 785 | 341 | 515 | 8,712 | 10,353 | 10,737 |
| ..... | 1 | 2 | 0 | 31 | 4 | 0 | 23 | 94 | 155 | 319 | 143 | 191 | 4,502 | 5,155 | 5,310 |
| ..... | 2 | 8 | 4 | 47 | 8 | 0 | 10 | 150 | 229 | 466 | 198 | 324 | 4,210 | 5,198 | 5,427 |
| ..... | 125 | 115 | 325 | 6,849 | 1,146 | 73 | 1,204 | 2,807 | 12,644 | 16,093 | 1,097 | 2,475 | 8,712 | 28,377 | 41,021 |
| ..... | 14 | 33 | 15 | 658 | 170 | 20 | 220 | 730 | 1,860 | 3,894 | 396 | 625 | 3,104 | 8,019 | 9,879 |
| ..... | 81 | 75 | 228 | 4,281 | 470 | 43 | 714 | 1,717 | 7,609 | 8,220 | 573 | 1,351 | 3,144 | 13,288 | 20,897 |
| ..... | 2 | 2 | 8 | 283 | 135 | 5 | 57 | 131 | 623 | 1,547 | 60 | 189 | 1,398 | 3,194 | 3,817 |
| ..... | 28 | 5 | 74 | 1,627 | 371 | 5 | 213 | 229 | 2,552 | 2,432 | 68 | 310 | 1,066 | 3,876 | 6,428 |

| Graduate Students Fall 1973 | |
|---|---|
| Beyond first | Total |
| 4,217 | 6,593 |

d all other U.S. sources.

| Postdoctorals and/or Research Associates Fall 1973 | | | | |
|---|---|---|---|---|
| Source of support | | | | |
| U.S. Government | | | | |
| Fellowships/ traineeships | Research associates | Non-U.S. Government | Total | Recent doctorals[3] |
| 3,858 | 3,140 | 3,522 | 10,520 | 5,809 |

**Survey of Graduate Science Student Support, Fall 1973**
**Departmental Data Sheet**

**TABLE IV-6**
**SUMMARY OF RESPONSES FROM 215 G**
**DEPARTMENTS IN PSYCHOLOG**

| Type of support | Citizenship and level | U.S. Government Source (excl. loans) | | | | | | | | | Non-Go | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | HEW | | | | | | | | |
| | | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | Insti-tutional support[1] | Foreign sources |
| Fellowships and traineeships | U.S. | 1 | 17 | 115 | 826 | 1,190 | 2 | 227 | 437 | 2,815 | 836 | 7 |
| | Foreign | | 0 | 0 | 3 | 8 | 0 | | 20 | 31 | 49 | 26 |
| | Subtotal | 1 | 17 | 115 | 829 | 1,198 | 2 | 227 | 457 | 2,846 | 885 | 33 |
| | First year | 0 | 2 | 9 | 200 | 323 | 1 | 49 | 87 | 671 | 240 | 7 |
| | Beyond | 1 | 15 | 106 | 629 | 875 | 1 | 178 | 370 | 2,175 | 645 | 26 |
| Graduate research assistantships | U.S. | 0 | 48 | 1 | 214 | 299 | 5 | 122 | 162 | 851 | 869 | |
| | Foreign | 0 | 2 | 0 | 22 | 19 | 0 | 9 | 5 | 57 | 28 | 1 |
| | Subtotal | 0 | 50 | 1 | 236 | 318 | 5 | 131 | 167 | 908 | 897 | 1 |
| | First year | 0 | 9 | 0 | 63 | 74 | 2 | 25 | 39 | 212 | 294 | 0 |
| | Beyond | 0 | 41 | 1 | 173 | 244 | 3 | 106 | 128 | 696 | 603 | 1 |
| Graduate teaching assistantships | U.S. | | | | 1 | 32 | | 4 | 2 | 39 | 3,183 | |
| | Foreign | | | | 0 | 1 | | 0 | 0 | 1 | 126 | |
| | Subtotal | | | | 1 | 33 | | 4 | 2 | 40 | 3,309 | |
| | First year | | | | 0 | 7 | | 0 | 0 | 7 | 894 | |
| | Beyond | | | | 1 | 26 | | 4 | 2 | 33 | 2,415 | |
| Other types of support | U.S. | 0 | 22 | 2 | 8 | 18 | 0 | 11 | 173 | 234 | 612 | |
| | Foreign | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 4 | 5 | 17 | 27 |
| | Subtotal | 0 | 22 | 2 | 8 | 19 | 0 | 11 | 177 | 239 | 629 | 27 |
| | First year | 0 | 8 | 0 | 2 | 0 | 0 | 0 | 49 | 59 | 135 | 14 |
| | Beyond | 0 | 14 | 2 | 6 | 19 | 0 | 11 | 128 | 180 | 494 | 13 |
| **All types, total** | | 1 | 89 | 118 | 1,074 | 1,568 | 7 | 373 | 803 | 4,033 | 5,720 | 61 |
| Men | First year | 0 | 14 | 5 | 155 | 238 | 1 | 41 | 119 | 573 | 918 | 13 |
| | Beyond | 1 | 61 | 69 | 524 | 733 | 4 | 198 | 442 | 2,032 | 2,737 | 23 |
| Women | First year | 0 | 5 | 4 | 110 | 166 | 2 | 33 | 56 | 376 | 645 | 8 |
| | Beyond | 0 | 9 | 40 | 285 | 431 | 0 | 101 | 186 | 1,052 | 1,420 | 17 |

| Part-time Graduate Students Fall 1973 | | |
|---|---|---|
| First year | Beyond first | Total |
| 669 | 2,549 | 3,218 |

| Postdoctorals and/or Research Assoc Fall 1973 | | | |
|---|---|---|---|
| Source of support | | | |
| U.S. Government | | | |
| Fellowships/ traineeships | Research associates | Non-U.S. Government | T |
| 54 | 76 | 60 | |

[1] Includes institution's and State and local governments.
[2] Includes support from nonprofit institutions, industry, and all other U.S. sources.
[3] Since 1969.

**nce Student Support, Fall 1973**
**ental Data Sheet**

## TABLE IV-6
## SUMMARY OF RESPONSES FROM 215 GRADUATE DEPARTMENTS IN PSYCHOLOGY

| ip and | U.S. Government Source (excl. loans) | | | | | | | | | Non-Government Source | | | | | Grand total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | HEW | | | | | | | Insti-tutional support[1] | Foreign sources | Other U.S. sources[2] | Self, loans, and family | Total | |
| | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | | | | | | |
| | 1 | 17 | 115 | 826 | 1,190 | 2 | 227 | 437 | 2,815 | 836 | 7 | 238 | | 1,081 | 3,896 |
| | 0 | 0 | 0 | 3 | 8 | 0 | | 20 | 31 | 49 | 26 | 9 | | 84 | 115 |
| | 1 | 17 | 115 | 829 | 1,198 | 2 | 227 | 457 | 2,846 | 885 | 33 | 247 | | 1,165 | 4,011 |
| | 0 | 2 | 9 | 200 | 323 | 1 | 49 | 87 | 671 | 240 | 7 | 48 | | 295 | 966 |
| | 1 | 15 | 106 | 629 | 875 | 1 | 178 | 370 | 2,175 | 645 | 26 | 199 | | 870 | 3,045 |
| | 0 | 48 | 1 | 214 | 299 | 5 | 122 | 162 | 851 | 869 | | 106 | | 975 | 1,826 |
| | 0 | 2 | 0 | 22 | 19 | 0 | 9 | 5 | 57 | 28 | 1 | 4 | | 33 | 90 |
| | 0 | 50 | 1 | 236 | 318 | 5 | 131 | 167 | 908 | 897 | 1 | 110 | | 1,008 | 1,916 |
| | 0 | 9 | 0 | 63 | 74 | 2 | 25 | 39 | 212 | 294 | 0 | 49 | | 343 | 555 |
| | 0 | 41 | 1 | 173 | 244 | 3 | 106 | 128 | 696 | 603 | 1 | 61 | | 665 | 1,361 |
| | | | | 1 | 32 | | 4 | 2 | 39 | 3,183 | | 13 | | 3,196 | 3,235 |
| | | | | 0 | 1 | | 0 | 0 | 1 | 126 | | 0 | | 126 | 127 |
| | | | | 1 | 33 | | 4 | 2 | 40 | 3,309 | | 13 | | 3,322 | 3,362 |
| | | | | 0 | 7 | | 0 | 0 | 7 | 894 | | 6 | | 900 | 907 |
| | | | | 1 | 26 | | 4 | 2 | 33 | 2,415 | | 7 | | 2,422 | 2,455 |
| | 0 | 22 | 2 | 8 | 18 | 0 | 11 | 173 | 234 | 612 | | 588 | 3,702 | 4,902 | 5,136 |
| | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 4 | 5 | 17 | 27 | 13 | 315 | 372 | 377 |
| | 0 | 22 | 2 | 8 | 19 | 0 | 11 | 177 | 239 | 629 | 27 | 601 | 4,017 | 5,274 | 5,513 |
| | 0 | 8 | 0 | 2 | 0 | 0 | 0 | 49 | 59 | 135 | 14 | 51 | 1,512 | 1,712 | 1,771 |
| | 0 | 14 | 2 | 6 | 19 | 0 | 11 | 128 | 180 | 494 | 13 | 550 | 2,505 | 3,562 | 3,742 |
| | 1 | 89 | 118 | 1,074 | 1,568 | 7 | 373 | 803 | 4,033 | 5,720 | 61 | 971 | 4,017 | 10,769 | 14,802 |
| | 0 | 14 | 5 | 155 | 238 | 1 | 41 | 119 | 573 | 918 | 13 | 83 | 894 | 1,908 | 2,481 |
| | 1 | 61 | 69 | 524 | 733 | 4 | 198 | 442 | 2,032 | 2,737 | 23 | 561 | 1,559 | 4,880 | 6,912 |
| | 0 | 5 | 4 | 110 | 166 | 2 | 33 | 56 | 376 | 645 | 8 | 71 | 618 | 1,342 | 1,718 |
| | 0 | 9 | 40 | 285 | 431 | 0 | 101 | 186 | 1,052 | 1,420 | 17 | 256 | 946 | 2,639 | 3,691 |

| ime Graduate Students<br>Fall 1973 | |
|---|---|
| Beyond first | Total |
| 2,549 | 3,218 |

nts
y, and all other U.S. sources.

| Postdoctorals and/or Research Associates<br>Fall 1973 | | | | |
|---|---|---|---|---|
| Source of support | | | | |
| U.S. Government | | | | |
| Fellowships/ traineeships | Research associates | Non-U.S. Government | Total | Recent doctorals[3] |
| 54 | 76 | 60 | 190 | 122 |

**Survey of Graduate Science Student Support, Fall 1973**
**Departmental Data Sheet**

**TABLE IV-7**
**SUMMARY OF RESPONSES FROM 928 GR**
**DEPARTMENTS IN THE SOCIAL SCIE**

| Type of support | Citizenship and level | U.S. Government Source (excl. loans) | | | | | | | | | Non-Gove | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | HEW | | | | | | | | | |
| | | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | Institutional support[1] | Foreign sources | s |
| Fellowships and traineeships | U.S. | 3 | 43 | 630 | 495 | 634 | 2 | 493 | 593 | 2,893 | 2,650 | 35 | |
| | Foreign | | 1 | 8 | 9 | 21 | 0 | | 330 | 369 | 406 | 491 | |
| | Subtotal | 3 | 44 | 638 | 504 | 655 | 2 | 493 | 923 | 3,262 | 3,056 | 526 | |
| | First year | 1 | 28 | 91 | 40 | 143 | 1 | 118 | 378 | 800 | 1,191 | 183 | |
| | Beyond | 2 | 16 | 547 | 464 | 512 | 1 | 375 | 545 | 2,462 | 1,865 | 343 | |
| Graduate research assistantships | U.S. | 1 | 17 | 3 | 50 | 132 | 10 | 262 | 483 | 958 | 2,225 | | |
| | Foreign | 0 | 3 | 2 | 14 | 8 | 3 | 60 | 146 | 236 | 419 | 8 | |
| | Subtotal | 1 | 20 | 5 | 64 | 140 | 13 | 322 | 629 | 1,194 | 2,644 | 8 | |
| | First year | 0 | 7 | 3 | 15 | 24 | 4 | 62 | 192 | 307 | 973 | 3 | |
| | Beyond | 1 | 13 | 2 | 49 | 116 | 9 | 260 | 437 | 887 | 1,671 | 5 | |
| Graduate teaching assistantships | U.S. | | | | 0 | 7 | | 5 | 31 | 43 | 7,026 | | |
| | Foreign | | | | 0 | 1 | | 2 | 4 | 7 | 911 | | |
| | Subtotal | | | | 0 | 8 | | 7 | 35 | 50 | 7,937 | | |
| | First year | | | | 0 | 1 | | 0 | 20 | 21 | 2,127 | | |
| | Beyond | | | | 0 | 7 | | 7 | 15 | 29 | 5,810 | | |
| Other types of support | U.S. | 0 | 202 | 3 | 6 | 9 | 0 | 17 | 324 | 561 | 864 | | |
| | Foreign | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 73 | 76 | 103 | 179 | |
| | Subtotal | 0 | 202 | 3 | 6 | 9 | 0 | 20 | 397 | 637 | 967 | 179 | |
| | First year | 0 | 105 | 1 | 2 | 1 | 0 | 2 | 164 | 275 | 336 | 89 | |
| | Beyond | 0 | 97 | 2 | 4 | 8 | 0 | 18 | 233 | 362 | 631 | 90 | |
| **All types, total** | | 4 | 266 | 646 | 574 | 812 | 15 | 842 | 1,984 | 5,143 | 14,604 | 713 | |
| Men | First year | 1 | 135 | 70 | 35 | 82 | 5 | 124 | 593 | 1,045 | 3,243 | 229 | |
| | Beyond | 2 | 120 | 416 | 308 | 380 | 10 | 494 | 1,008 | 2,738 | 7,464 | 387 | |
| Women | First year | 0 | 5 | 25 | 22 | 87 | 0 | 58 | 161 | 358 | 1,384 | 46 | |
| | Beyond | 1 | 6 | 135 | 209 | 263 | 0 | 166 | 222 | 1,002 | 2,513 | 51 | |

| Part-time Graduate Students Fall 1973 | | |
|---|---|---|
| First year | Beyond first | Total |
| 3,892 | 8,889 | 12,781 |

| Postdoctorals and/or Research Associate Fall 1973 | | | |
|---|---|---|---|
| Source of support | | | |
| U.S. Government | | | |
| Fellowships/ traineeships | Research associates | Non-U.S. Government | Tota |
| 57 | 108 | 239 | 404 |

[1] Includes institution's and State and local governments.
[2] Includes support from nonprofit institutions, industry, and all other U.S. sources.
[3] Since 1969.

ce Student Support, Fall 1973
tal Data Sheet

## TABLE IV-7
## SUMMARY OF RESPONSES FROM 928 GRADUATE DEPARTMENTS IN THE SOCIAL SCIENCES

| and | U.S. Government Source (excl. loans) | | | | | | | | | Non-Government Source | | | | | Grand total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | HEW | | | | | | | | | | | | |
| | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | Institutional support[1] | Foreign sources | Other U.S. sources[2] | Self, loans, and family | Total | |
| ..... | 3 | 43 | 630 | 495 | 634 | 2 | 493 | 593 | 2,893 | 2,650 | 35 | 900 | | 3,585 | 6,478 |
| ..... | | 1 | 8 | 9 | 21 | 0 | | 330 | 369 | 406 | 491 | 336 | | 1,233 | 1,602 |
| ..... | 3 | 44 | 638 | 504 | 655 | 2 | 493 | 923 | 3,262 | 3,056 | 526 | 1,236 | | 4,818 | 8,080 |
| ..... | 1 | 28 | 91 | 40 | 143 | 1 | 118 | 378 | 800 | 1,191 | 183 | 368 | | 1,742 | 2,542 |
| ..... | 2 | 16 | 547 | 464 | 512 | 1 | 375 | 545 | 2,462 | 1,865 | 343 | 868 | | 3,076 | 5,538 |
| ..... | 1 | 17 | 3 | 50 | 132 | 10 | 262 | 483 | 958 | 2,225 | | 253 | | 2,478 | 3,436 |
| ..... | 0 | 3 | 2 | 14 | 8 | 3 | 60 | 146 | 236 | 419 | 8 | 60 | | 487 | 723 |
| ..... | 1 | 20 | 5 | 64 | 140 | 13 | 322 | 629 | 1,194 | 2,644 | 8 | 313 | | 2,965 | 4,159 |
| ..... | 0 | 7 | 3 | 15 | 24 | 4 | 62 | 192 | 307 | 973 | 3 | 116 | | 1,092 | 1,399 |
| ..... | 1 | 13 | 2 | 49 | 116 | 9 | 260 | 437 | 887 | 1,671 | 5 | 197 | | 1,873 | 2,760 |
| ..... | | | | 0 | 7 | | 5 | 31 | 43 | 7,026 | | 53 | | 7,079 | 7,122 |
| ..... | | | | 0 | 1 | | 2 | 4 | 7 | 911 | | 2 | | 913 | 920 |
| ..... | | | | 0 | 8 | | 7 | 35 | 50 | 7,937 | | 55 | | 7,992 | 8,042 |
| ..... | | | | 0 | 1 | | 0 | 20 | 21 | 2,127 | | 11 | | 2,138 | 2,159 |
| ..... | | | | 0 | 7 | | 7 | 15 | 29 | 5,810 | | 44 | | 5,854 | 5,883 |
| ..... | 0 | 202 | 3 | 6 | 9 | 0 | 17 | 324 | 561 | 864 | | 403 | 11,258 | 12,525 | 13,086 |
| ..... | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 73 | 76 | 103 | 179 | 38 | 1,670 | 1,990 | 2,066 |
| ..... | 0 | 202 | 3 | 6 | 9 | 0 | 20 | 397 | 637 | 967 | 179 | 441 | 12,928 | 14,515 | 15,152 |
| ..... | 0 | 105 | 1 | 2 | 1 | 0 | 2 | 164 | 275 | 336 | 89 | 140 | 5,280 | 5,845 | 6,120 |
| ..... | 0 | 97 | 2 | 4 | 8 | 0 | 18 | 233 | 362 | 631 | 90 | 301 | 7,648 | 8,670 | 9,032 |
| ..... | 4 | 266 | 646 | 574 | 812 | 15 | 842 | 1,984 | 5,143 | 14,604 | 713 | 2,045 | 12,928 | 30,290 | 35,433 |
| ..... | 1 | 135 | 70 | 35 | 82 | 5 | 124 | 593 | 1,045 | 3,243 | 229 | 462 | 3,731 | 7,665 | 8,710 |
| ..... | 2 | 120 | 416 | 308 | 380 | 10 | 494 | 1,008 | 2,738 | 7,464 | 387 | 1,046 | 5,592 | 14,489 | 17,227 |
| ..... | 0 | 5 | 25 | 22 | 87 | 0 | 58 | 161 | 358 | 1,384 | 46 | 173 | 1,549 | 3,152 | 3,510 |
| ..... | 1 | 6 | 135 | 209 | 263 | 0 | 166 | 222 | 1,002 | 2,513 | 51 | 364 | 2,056 | 4,984 | 5,986 |

| Graduate Students Fall 1973 | |
|---|---|
| Beyond first | Total |
| 8,889 | 12,781 |

d all other U.S. sources

| Postdoctorals and/or Research Associates Fall 1973 | | | | |
|---|---|---|---|---|
| Source of support | | | | |
| U.S. Government | | | | |
| Fellowships/ traineeships | Research associates | Non-U.S. Government | Total | Recent doctorals[3] |
| 57 | 108 | 239 | 404 | 132 |

**Survey of Graduate Science Student Support, Fall 1973**
**Departmental Data Sheet**

**TABLE IV-8**
**SUMMARY OF RESPONSES FROM 16 G**
**DEPARTMENTS IN ALL OTHER SCIE**

| Type of support | Citizenship and level | U.S. Government Source (excl. loans) | | | | | | | | | Non-Gov | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | HEW | | | | | | | | |
| | | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | Insti-tutional support[1] | Foreign sources |
| Fellowships and traineeships | U.S. | 0 | 0 | 1 | 0 | 25 | 0 | 0 | 1 | 27 | 3 | 0 |
| | Foreign | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 1 | 0 |
| | Subtotal | 0 | 0 | 1 | 0 | 25 | 0 | 0 | 1 | 27 | 4 | 0 |
| | First year | 0 | 0 | 0 | 0 | 25 | 0 | 0 | 1 | 26 | 3 | 0 |
| | Beyond | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 |
| Graduate research assistantships | U.S. | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 9 | |
| | Foreign | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| | Subtotal | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 10 | 0 |
| | First year | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| | Beyond | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 9 | 0 |
| Graduate teaching assistantships | U.S. | | | | 0 | 0 | | 0 | 0 | 0 | 33 | |
| | Foreign | | | | 0 | 0 | | 0 | 0 | 0 | 4 | |
| | Subtotal | | | | 0 | 0 | | 0 | 0 | 0 | 37 | |
| | First year | | | | 0 | 0 | | 0 | 0 | 0 | 18 | |
| | Beyond | | | | 0 | 0 | | 0 | 0 | 0 | 19 | |
| Other types of support | U.S. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 4 | 0 |
| | Foreign | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Subtotal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 4 | 0 |
| | First year | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 |
| | Beyond | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 |
| **All types, total** | | 0 | 0 | 1 | 2 | 25 | 0 | 0 | 2 | 30 | 55 | 0 |
| Men | First year | 0 | 0 | 0 | 0 | 13 | 0 | 0 | 1 | 14 | 19 | 0 |
| | Beyond | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 3 | 19 | 0 |
| Women | First year | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 12 | 7 | 0 |
| | Beyond | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 10 | 0 |

| Part-time Graduate Students Fall 1973 | | |
|---|---|---|
| First year | Beyond first | Total |
| 86 | 136 | 222 |

| Postdoctorals and/or Research Associ Fall 1973 | | | |
|---|---|---|---|
| Source of support | | | |
| U.S. Government | | Non-U.S. Government | T |
| Fellowships/ traineeships | Research associates | | |
| 0 | 0 | 1 | |

[1] Includes institution's and State and local governments.
[2] Includes support from nonprofit institutions, industry, and all other U.S. sources.
[3] Since 1969.

nce Student Support, Fall 1973
ental Data Sheet

## TABLE IV-8
## SUMMARY OF RESPONSES FROM 16 GRADUATE DEPARTMENTS IN ALL OTHER SCIENCES

| ip and l | U.S. Government Source (excl. loans) | | | | | | | | | Non-Government Source | | | | | Grand total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | HEW | | | | | | | | | | | | |
| | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | Institutional support[1] | Foreign sources | Other U.S. sources[2] | Self, loans, and family | Total | |
| | 0 | 0 | 1 | 0 | 25 | 0 | 0 | 1 | 27 | 3 | 0 | 0 | | 3 | 30 |
| | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 1 | 0 | 1 | | 2 | 2 |
| l | 0 | 0 | 1 | 0 | 25 | 0 | 0 | 1 | 27 | 4 | 0 | 1 | | 5 | 32 |
| | 0 | 0 | 0 | 0 | 25 | 0 | 0 | 1 | 26 | 3 | 0 | 1 | | 4 | 30 |
| | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | | 1 | 2 |
| | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 9 | | 0 | | 9 | 11 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | | 1 | 1 |
| l | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 10 | 0 | 0 | | 10 | 12 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | | 1 | 1 |
| | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 9 | 0 | 0 | | 9 | 11 |
| | | | | 0 | 0 | | 0 | 0 | 0 | 33 | | 0 | | 33 | 33 |
| | | | | 0 | 0 | | 0 | 0 | 0 | 4 | | 0 | | 4 | 4 |
| l | | | | 0 | 0 | | 0 | 0 | 0 | 37 | | 0 | | 37 | 37 |
| | | | | 0 | 0 | | 0 | 0 | 0 | 18 | | 0 | | 18 | 18 |
| | | | | 0 | 0 | | 0 | 0 | 0 | 19 | | 0 | | 19 | 19 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 4 | 0 | 1 | 40 | 45 | 46 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 6 | 6 |
| l | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 4 | 0 | 1 | 46 | 51 | 52 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 1 | 21 | 26 | 26 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 25 | 25 | 26 |
| | 0 | 0 | 1 | 2 | 25 | 0 | 0 | 2 | 30 | 55 | 0 | 2 | 46 | 103 | 133 |
| | 0 | 0 | 0 | 0 | 13 | 0 | 0 | 1 | 14 | 19 | 0 | 2 | 14 | 35 | 49 |
| | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 3 | 19 | 0 | 0 | 20 | 39 | 42 |
| | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 12 | 7 | 0 | 0 | 7 | 14 | 26 |
| | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 10 | 0 | 0 | 5 | 15 | 16 |

| -time Graduate Students Fall 1973 | | |
|---|---|---|
| 7 | Beyond first | Total |
| | 136 | 222 |

nts.
try, and all other U.S. sources.

| Postdoctorals and/or Research Associates Fall 1973 | | | | |
|---|---|---|---|---|
| Source of support | | | | |
| U.S. Government | | | | |
| Fellowships/ traineeships | Research associates | Non-U.S. Government | Total | Recent doctorals[3] |
| 0 | 0 | 1 | 1 | 1 |

**Survey of Graduate Science Student Support, Fall 1973**
**Departmental Data Sheet**

## TABLE IV-9
## SUMMARY OF RESPONSES FROM 876 MASTERS DEPARTMENTS

| Type of support | Citizenship and level | U.S. Government Source (excl. loans) | | | | | | | | | Non-Govern | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | HEW | | | | | | | | | |
| | | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | Institutional support[1] | Foreign sources | O U sou |
| Fellowships and traineeships | U.S. | 8 | 71 | 12 | 61 | 141 | 2 | 29 | 179 | 503 | 338 | 10 | |
| | Foreign | | 0 | 0 | 3 | 4 | 0 | | 32 | 39 | 44 | 66 | |
| | Subtotal | 8 | 71 | 12 | 64 | 145 | 2 | 29 | 211 | 542 | 382 | 76 | |
| | First year | 3 | 63 | 8 | 24 | 37 | 1 | 17 | 139 | 292 | 225 | 47 | |
| | Beyond | 5 | 8 | 4 | 40 | 108 | 1 | 12 | 72 | 250 | 157 | 29 | |
| Graduate research assistantships | U.S. | 8 | 39 | 0 | 21 | 29 | 13 | 71 | 307 | 488 | 879 | | |
| | Foreign | 0 | 5 | 0 | 4 | 6 | 5 | 29 | 56 | 105 | 165 | 24 | |
| | Subtotal | 8 | 44 | 0 | 25 | 35 | 18 | 100 | 363 | 593 | 1,044 | 24 | |
| | First year | 3 | 19 | 0 | 7 | 12 | 8 | 54 | 163 | 266 | 593 | 9 | |
| | Beyond | 5 | 25 | 0 | 18 | 23 | 10 | 46 | 200 | 327 | 451 | 15 | |
| Graduate teaching assistantships | U.S. | | | | 0 | 6 | | 13 | 17 | 36 | 3,105 | | |
| | Foreign | | | | 0 | 0 | | 2 | 6 | 8 | 370 | | |
| | Subtotal | | | | 0 | 6 | | 15 | 23 | 44 | 3,475 | | |
| | First year | | | | 0 | 4 | | 9 | 16 | 29 | 1,911 | | |
| | Beyond | | | | 0 | 2 | | 6 | 7 | 15 | 1,564 | | |
| Other types of support | U.S. | 0 | 386 | 0 | 0 | 6 | 0 | 24 | 218 | 634 | 351 | | |
| | Foreign | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 28 | 47 | 38 | 114 | |
| | Subtotal | 0 | 405 | 0 | 0 | 6 | 0 | 24 | 246 | 681 | 389 | 114 | |
| | First year | 0 | 208 | 0 | 0 | 1 | 0 | 22 | 134 | 365 | 230 | 73 | |
| | Beyond | 0 | 197 | 0 | 0 | 5 | 0 | 2 | 112 | 316 | 159 | 41 | |
| **All types, total** | | 16 | 520 | 12 | 89 | 192 | 20 | 168 | 843 | 1,860 | 5,290 | 214 | |
| Men | First year | 6 | 289 | 8 | 13 | 20 | 9 | 79 | 387 | 811 | 2,211 | 104 | |
| | Beyond | 9 | 229 | 4 | 33 | 28 | 11 | 60 | 346 | 720 | 1,769 | 70 | |
| Women | First year | 0 | 1 | 0 | 18 | 34 | 0 | 23 | 65 | 141 | 748 | 25 | |
| | Beyond | 1 | 1 | 0 | 25 | 110 | 0 | 6 | 45 | 188 | 562 | 15 | |

| Part-time Graduate Students Fall 1973 | | |
|---|---|---|
| First year | Beyond first | Total |
| 4,964 | 5,048 | 10,012 |

| Postdoctorals and/or Research Associates Fall 1973 | | | |
|---|---|---|---|
| Source of support | | | |
| U.S. Government | | Non-U.S. Government | Total |
| Fellowships/ traineeships | Research associates | | |
| 22 | 61 | 61 | 144 |

[1] Includes institution's and State and local governments.
[2] Includes support from nonprofit institutions, industry, and all other U.S. sources.
[3] Since 1969.

...ce Student Support, Fall 1973
...ntal Data Sheet

## TABLE IV-9
## SUMMARY OF RESPONSES FROM 876 MASTERS DEPARTMENTS

| ...and | U.S. Government Source (excl. loans) | | | | | | | | | Non-Government Source | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | HEW | | | | | | | | | | | | |
| | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | Institutional support[1] | Foreign sources | Other U.S. sources[2] | Self, loans, and family | Total | Grand total |
| ..... | 8 | 71 | 12 | 61 | 141 | 2 | 29 | 179 | 503 | 338 | 10 | 140 | | 488 | 991 |
| ..... | | 0 | 0 | 3 | 4 | 0 | | 32 | 39 | 44 | 66 | 29 | | 139 | 178 |
| ..... | 8 | 71 | 12 | 64 | 145 | 2 | 29 | 211 | 542 | 382 | 76 | 169 | | 627 | 1,169 |
| ..... | 3 | 63 | 8 | 24 | 37 | 1 | 17 | 139 | 292 | 225 | 47 | 97 | | 369 | 661 |
| ..... | 5 | 8 | 4 | 40 | 108 | 1 | 12 | 72 | 250 | 157 | 29 | 72 | | 258 | 508 |
| ..... | 8 | 39 | 0 | 21 | 29 | 13 | 71 | 307 | 488 | 879 | | 160 | | 1,039 | 1,527 |
| ..... | 0 | 5 | 0 | 4 | 6 | 5 | 29 | 56 | 105 | 165 | 24 | 30 | | 219 | 324 |
| ..... | 8 | 44 | 0 | 25 | 35 | 18 | 100 | 363 | 593 | 1,044 | 24 | 190 | | 1,258 | 1,851 |
| ..... | 3 | 19 | 0 | 7 | 12 | 8 | 54 | 163 | 266 | 593 | 9 | 105 | | 707 | 973 |
| ..... | 5 | 25 | 0 | 18 | 23 | 10 | 46 | 200 | 327 | 451 | 15 | 85 | | 551 | 878 |
| ..... | | | | 0 | 6 | | 13 | 17 | 36 | 3,105 | | 28 | | 3,133 | 3,169 |
| ..... | | | | 0 | 0 | | 2 | 6 | 8 | 370 | | 0 | | 370 | 378 |
| ..... | | | | 0 | 6 | | 15 | 23 | 44 | 3,475 | | 28 | | 3,503 | 3,547 |
| ..... | | | | 0 | 4 | | 9 | 16 | 29 | 1,911 | | 17 | | 1,928 | 1,957 |
| ..... | | | | 0 | 2 | | 6 | 7 | 15 | 1,564 | | 11 | | 1,575 | 1,590 |
| ..... | 0 | 386 | 0 | 0 | 6 | 0 | 24 | 218 | 634 | 351 | | 161 | 4,152 | 4,664 | 5,298 |
| ..... | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 28 | 47 | 38 | 114 | 11 | 634 | 797 | 844 |
| ..... | 0 | 405 | 0 | 0 | 6 | 0 | 24 | 246 | 681 | 389 | 114 | 172 | 4,786 | 5,461 | 6,142 |
| ..... | 0 | 208 | 0 | 0 | 1 | 0 | 22 | 134 | 365 | 230 | 73 | 82 | 2,685 | 3,070 | 3,435 |
| ..... | 0 | 197 | 0 | 0 | 5 | 0 | 2 | 112 | 316 | 159 | 41 | 90 | 2,101 | 2,391 | 2,707 |
| ..... | 16 | 520 | 12 | 89 | 192 | 20 | 168 | 843 | 1,860 | 5,290 | 214 | 559 | 4,786 | 10,849 | 12,709 |
| ..... | 6 | 289 | 8 | 13 | 20 | 9 | 79 | 387 | 811 | 2,211 | 104 | 251 | 1,910 | 4,476 | 5,287 |
| ..... | 9 | 229 | 4 | 33 | 28 | 11 | 60 | 346 | 720 | 1,769 | 70 | 213 | 1,632 | 3,684 | 4,404 |
| ..... | 0 | 1 | 0 | 18 | 34 | 0 | 23 | 85 | 141 | 748 | 25 | 50 | 775 | 1,598 | 1,739 |
| ..... | 1 | 1 | 0 | 25 | 110 | 0 | 6 | 45 | 188 | 562 | 15 | 45 | 469 | 1,091 | 1,279 |

| ...e Graduate Students Fall 1973 | |
|---|---|
| Beyond first | Total |
| 5,048 | 10,012 |

| Postdoctorals and/or Research Associates Fall 1973 | | | | |
|---|---|---|---|---|
| Source of support | | | | |
| U.S. Government | | | | |
| Fellowships/ traineeships | Research associates | Non-U.S. Government | Total | Recent doctorals[3] |
| 22 | 61 | 61 | 144 | 65 |

...and all other U.S. sources.

**Survey of Graduate Science Student Support, Fall 1973**
**Departmental Data Sheet**

**TABLE IV-10**
**SUMMARY OF RESPONSES FROM 1**
**DEPARTMENTS IN ENGINEE**

| Type of support | Citizenship and level | U.S. Government Source (excl. loans) | | | | | | | | | Non | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | HEW | | | | | | | | |
| | | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | Institutional support[1] | Fore sou |
| Fellowships and traineeships | U.S. | 4 | 50 | 1 | 3 | 5 | 0 | 5 | 59 | 127 | 27 | |
| | Foreign | | 0 | 0 | 0 | 0 | 0 | | 9 | 9 | 8 | |
| | Subtotal | 4 | 50 | 1 | 3 | 5 | 0 | 5 | 68 | 136 | 35 | |
| | First year | 2 | 49 | 1 | 1 | 3 | 0 | 5 | 52 | 113 | 13 | |
| | Beyond | 2 | 1 | 0 | 2 | 2 | 0 | 0 | 16 | 23 | 22 | |
| Graduate research assistantships | U.S. | 2 | 23 | 0 | 0 | 0 | 5 | 27 | 56 | 113 | 119 | |
| | Foreign | 0 | 2 | 0 | 0 | 0 | 4 | 21 | 25 | 52 | 60 | |
| | Subtotal | 2 | 25 | 0 | 0 | 0 | 9 | 48 | 81 | 185 | 179 | |
| | First year | 2 | 13 | 0 | 0 | 0 | 5 | 28 | 51 | 99 | 103 | |
| | Beyond | 0 | 12 | 0 | 0 | 0 | 4 | 20 | 30 | 66 | 76 | |
| Graduate teaching assistantships | U.S. | | | | 0 | 0 | | 0 | 3 | 3 | 370 | |
| | Foreign | | | | 0 | 0 | | 0 | 0 | 0 | 87 | |
| | Subtotal | | | | 0 | 0 | | 0 | 3 | 3 | 457 | |
| | First year | | | | 0 | 0 | | 0 | 3 | 3 | 275 | |
| | Beyond | | | | 0 | 0 | | 0 | 0 | 0 | 182 | |
| Other types of support | U.S. | 0 | 108 | 0 | 0 | 0 | 0 | 0 | 70 | 178 | 32 | |
| | Foreign | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 9 | 3 |
| | Subtotal | 0 | 108 | 0 | 0 | 0 | 0 | 0 | 74 | 182 | 41 | 3 |
| | First year | 0 | 54 | 0 | 0 | 0 | 0 | 0 | 30 | 84 | 27 | 2 |
| | Beyond | 0 | 54 | 0 | 0 | 0 | 0 | 0 | 44 | 98 | 14 | 1 |
| **All types, total** | | 6 | 183 | 1 | 3 | 5 | 9 | 53 | 226 | 486 | 712 | 4 |
| Men | First year | 4 | 116 | 1 | 1 | 3 | 5 | 31 | 125 | 286 | 392 | 2 |
| | Beyond | 2 | 67 | 0 | 2 | 0 | 4 | 20 | 86 | 181 | 276 | 1 |
| Women | First year | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 11 | 13 | 26 | |
| | Beyond | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 4 | 6 | 18 | |

| Part-time Graduate Students Fall 1973 | | |
|---|---|---|
| First year | Beyond first | Total |
| 1,853 | 1,747 | 3,600 |

| Postdoctorals and/or Research Ass Fall 1973 | | | |
|---|---|---|---|
| Source of support | | | |
| U.S. Government | | Non-U.S. Government | |
| Fellowships/ traineeships | Research associates | | |
| 0 | 4 | 9 | |

[1] Includes institution's and State and local governments.
[2] Includes support from nonprofit institutions, industry, and all other U.S. sources.
[3] Since 1969.

**cience Student Support, Fall 1973**
**tmental Data Sheet**

## TABLE IV-10
## SUMMARY OF RESPONSES FROM 189 MASTER'S DEPARTMENTS IN ENGINEERING

| nship and evel | U.S. Government Source (excl. loans) | | | | | | | | | Non-Government Source | | | | | Grand total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | HEW | | | | | | | | | | | | |
| | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | Institutional support[1] | Foreign sources | Other U.S. sources[2] | Self, loans, and family | Total | |
| | 4 | 50 | 1 | 3 | 5 | 0 | 5 | 59 | 127 | 27 | 0 | 15 | | 42 | 169 |
| | | 0 | 0 | 0 | 0 | 0 | | 9 | 9 | 8 | 9 | 3 | | 20 | 29 |
| otal | 4 | 50 | 1 | 3 | 5 | 0 | 5 | 68 | 136 | 35 | 9 | 18 | | 62 | 198 |
| | 2 | 49 | 1 | 1 | 3 | 0 | 5 | 52 | 113 | 13 | 7 | 13 | | 33 | 146 |
| | 2 | 1 | 0 | 2 | 2 | 0 | 0 | 16 | 23 | 22 | 2 | 5 | | 29 | 52 |
| | 2 | 23 | 0 | 0 | 0 | 5 | 27 | 56 | 113 | 119 | | 39 | | 158 | 271 |
| | 0 | 2 | 0 | 0 | 0 | 4 | 21 | 25 | 52 | 60 | 4 | 14 | | 78 | 130 |
| otal | 2 | 25 | 0 | 0 | 0 | 9 | 48 | 81 | 185 | 179 | 4 | 53 | | 236 | 401 |
| | 2 | 13 | 0 | 0 | 0 | 5 | 28 | 51 | 99 | 103 | 0 | 39 | | 142 | 241 |
| | 0 | 12 | 0 | 0 | 0 | 4 | 20 | 30 | 66 | 76 | 4 | 14 | | 94 | 160 |
| | | | | 0 | 0 | | 0 | 3 | 3 | 370 | | 8 | | 378 | 381 |
| | | | | 0 | 0 | | 0 | 0 | 0 | 87 | | 0 | | 87 | 87 |
| otal | | | | 0 | 0 | | 0 | 3 | 3 | 457 | | 8 | | 465 | 468 |
| | | | | 0 | 0 | | 0 | 3 | 3 | 275 | | 6 | | 281 | 284 |
| | | | | 0 | 0 | | 0 | 0 | 0 | 182 | | 2 | | 184 | 184 |
| | 0 | 108 | 0 | 0 | 0 | 0 | 0 | 70 | 178 | 32 | | 22 | 607 | 661 | 839 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 9 | 33 | 3 | 299 | 344 | 348 |
| otal | 0 | 108 | 0 | 0 | 0 | 0 | 0 | 74 | 182 | 41 | 33 | 25 | 906 | 1,005 | 1,187 |
| | 0 | 54 | 0 | 0 | 0 | 0 | 0 | 30 | 84 | 27 | 21 | 10 | 495 | 553 | 637 |
| | 0 | 54 | 0 | 0 | 0 | 0 | 0 | 44 | 98 | 14 | 12 | 15 | 411 | 452 | 550 |
| | 6 | 183 | 1 | 3 | 5 | 9 | 53 | 226 | 486 | 712 | 46 | 104 | 906 | 1,768 | 2,254 |
| | 4 | 116 | 1 | 1 | 3 | 5 | 31 | 125 | 286 | 392 | 28 | 68 | 456 | 944 | 1230 |
| | 2 | 67 | 0 | 2 | 0 | 4 | 20 | 86 | 181 | 276 | 16 | 36 | 373 | 701 | 882 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 11 | 13 | 26 | 0 | 0 | 39 | 65 | 78 |
| | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 4 | 6 | 18 | 2 | 0 | 38 | 58 | 64 |

| rt-time Graduate Students Fall 1973 | | |
|---|---|---|
| ar | Beyond first | Total |
| | 1,747 | 3,600 |

ments
ustry, and all other U.S. sources

| Postdoctorals and/or Research Associates Fall 1973 | | | | |
|---|---|---|---|---|
| Source of support | | | | |
| U.S. Government | | | | |
| Fellowships/ traineeships | Research associates | Non-U.S. Government | Total | Recent doctorals[3] |
| 0 | 4 | 9 | 13 | 4 |

**Survey of Graduate Science Student Support, Fall 1973**
**Departmental Data Sheet**

## TABLE IV-11
## SUMMARY OF RESPONSES FROM 128 MAS
## DEPARTMENTS IN PHYSICAL SCIENCI

| Type of support | Citizenship and level | U.S. Government Source (excl. loans) | | | | | | | | | Non-Governm | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | HEW | | | | | | | | | |
| | | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | Insti-tutional support[1] | Foreign sources | Ot U. sou |
| Fellowships and traineeships | U.S. | 3 | 2 | 1 | 8 | 1 | 0 | 4 | 23 | 42 | 24 | 1 | |
| | Foreign | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 2 | 6 | |
| | Subtotal | 3 | 2 | 1 | 8 | 1 | 0 | 4 | 23 | 42 | 26 | 7 | |
| | First year | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 16 | 19 | 15 | 3 | |
| | Beyond | 3 | 1 | 1 | 7 | 1 | 0 | 3 | 7 | 23 | 11 | 4 | |
| Graduate research assistantships | U.S. | 3 | 11 | 0 | 2 | 0 | 6 | 13 | 35 | 70 | 73 | | |
| | Foreign | 0 | 2 | 0 | 1 | 0 | 0 | 4 | 1 | 8 | 12 | 2 | |
| | Subtotal | 3 | 13 | 0 | 3 | 0 | 6 | 17 | 36 | 78 | 85 | 2 | |
| | First year | 0 | 5 | 0 | 0 | 0 | 2 | 7 | 11 | 25 | 51 | 1 | |
| | Beyond | 3 | 8 | 0 | 3 | 0 | 4 | 10 | 25 | 53 | 34 | 1 | |
| Graduate teaching assistantships | U.S. | | | | 0 | 0 | | 2 | 0 | 2 | 567 | | |
| | Foreign | | | | 0 | 0 | | 0 | 0 | 0 | 84 | | |
| | Subtotal | | | | 0 | 0 | | 2 | 0 | 2 | 651 | | |
| | First year | | | | 0 | 0 | | 2 | 0 | 2 | 328 | | |
| | Beyond | | | | 0 | 0 | | 0 | 0 | 0 | 323 | | |
| Other types of support | U.S. | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 22 | 23 | 25 | | |
| | Foreign | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 6 | |
| | Subtotal | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 22 | 23 | 38 | 6 | |
| | First year | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 8 | 16 | 5 | |
| | Beyond | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 14 | 15 | 22 | 1 | |
| **All types, total** | | 6 | 15 | 1 | 11 | 1 | 6 | 24 | 81 | 145 | 800 | 15 | |
| Men | First year | 0 | 6 | 0 | 0 | 0 | 2 | 9 | 32 | 49 | 366 | 7 | |
| | Beyond | 6 | 9 | 1 | 7 | 0 | 4 | 13 | 42 | 82 | 333 | 6 | |
| Women | First year | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 3 | 5 | 44 | 2 | |
| | Beyond | 0 | 0 | 0 | 3 | 1 | 0 | 1 | 4 | 9 | 57 | 0 | |

| Part-time Graduate Students Fall 1973 | | |
|---|---|---|
| First year | Beyond first | Total |
| 234 | 396 | 630 |

| Postdoctorals and/or Research Associates Fall 1973 | | | |
|---|---|---|---|
| Source of support | | | |
| U.S. Government | | | |
| Fellowships/ traineeships | Research associates | Non-U.S. Government | Total |
| 1 | 9 | 7 | 17 |

[1] Includes institution's and State and local governments.
[2] Includes support from nonprofit institutions, industry, and all other U.S. sources.
[3] Since 1969.

ce Student Support, Fall 1973
tal Data Sheet

## TABLE IV-11
## SUMMARY OF RESPONSES FROM 128 MASTER's DEPARTMENTS IN PHYSICAL SCIENCES

| and | U.S. Government Source (excl. loans) | | | | | | | | | Non-Government Source | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | HEW | | | | | | | | | | | | |
| | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | Institutional support[1] | Foreign sources | Other U.S. sources[2] | Self, loans, and family | Total | Grand total |
| ..... | 3 | 2 | 1 | 8 | 1 | 0 | 4 | 23 | 42 | 24 | 1 | 16 | | 41 | 83 |
| ..... | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 2 | 6 | 3 | | 11 | 11 |
| ..... | 3 | 2 | 1 | 8 | 1 | 0 | 4 | 23 | 42 | 26 | 7 | 19 | | 52 | 94 |
| ..... | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 16 | 19 | 15 | 3 | 4 | | 22 | 41 |
| ..... | 3 | 1 | 1 | 7 | 1 | 0 | 3 | 7 | 23 | 11 | 4 | 15 | | 30 | 53 |
| ..... | 3 | 11 | 0 | 2 | 0 | 6 | 13 | 35 | 70 | 73 | | 39 | | 112 | 182 |
| ..... | 0 | 2 | 0 | 1 | 0 | 0 | 4 | 1 | 8 | 12 | 2 | 4 | | 18 | 26 |
| ..... | 3 | 13 | 0 | 3 | 0 | 6 | 17 | 36 | 78 | 85 | 2 | 43 | | 130 | 208 |
| ..... | 0 | 5 | 0 | 0 | 0 | 2 | 7 | 11 | 25 | 51 | 1 | 12 | | 64 | 89 |
| ..... | 3 | 8 | 0 | 3 | 0 | 4 | 10 | 25 | 53 | 34 | 1 | 31 | | 66 | 119 |
| ..... | | | | 0 | 0 | | 2 | 0 | 2 | 567 | | 5 | | 572 | 574 |
| ..... | | | | 0 | 0 | | 0 | 0 | 0 | 84 | | 0 | | 84 | 84 |
| ..... | | | | 0 | 0 | | 2 | 0 | 2 | 651 | | 5 | | 656 | 658 |
| ..... | | | | 0 | 0 | | 2 | 0 | 2 | 328 | | 5 | | 333 | 335 |
| ..... | | | | 0 | 0 | | 0 | 0 | 0 | 323 | | 0 | | 323 | 323 |
| ..... | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 22 | 23 | 25 | | 25 | 212 | 262 | 285 |
| ..... | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 6 | 0 | 28 | 47 | 47 |
| ..... | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 22 | 23 | 38 | 6 | 25 | 240 | 309 | 332 |
| ..... | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 8 | 16 | 5 | 11 | 122 | 154 | 162 |
| ..... | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 14 | 15 | 22 | 1 | 14 | 118 | 155 | 170 |
| ..... | 6 | 15 | 1 | 11 | 1 | 6 | 24 | 81 | 145 | 800 | 15 | 92 | 240 | 1,147 | 1,292 |
| ..... | 0 | 6 | 0 | 0 | 0 | 2 | 9 | 32 | 49 | 366 | 7 | 28 | 101 | 502 | 551 |
| ..... | 6 | 9 | 1 | 7 | 0 | 4 | 13 | 42 | 82 | 333 | 6 | 49 | 104 | 492 | 574 |
| ..... | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 3 | 5 | 44 | 2 | 4 | 21 | 71 | 76 |
| ..... | 0 | 0 | 0 | 3 | 1 | 0 | 1 | 4 | 9 | 57 | 0 | 11 | 14 | 82 | 91 |

| e Graduate Students Fall 1973 | |
|---|---|
| Beyond first | Total |
| 396 | 630 |

nd all other U.S. sources.

| Postdoctorals and/or Research Associates Fall 1973 | | | | |
|---|---|---|---|---|
| Source of support | | | | |
| U.S. Government | | | | |
| Fellowships/ traineeships | Research associates | Non-U.S. Government | Total | Recent doctorals[3] |
| 1 | 9 | 7 | 17 | 13 |

**Survey of Graduate Science Student Support, Fall 1973**
**Departmental Data Sheet**

**TABLE IV-12**
**SUMMARY OF RESPONSES FROM 83**
**DEPARTMENTS IN THE MATHEMATICA**

| Type of support | Citizenship and level | U.S. Government Source (excl. loans) | | | | | | | | | Non-G | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | HEW | | | | | | | | |
| | | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | Institutional support[1] | Foreign source |
| Fellowships and traineeships | U.S. | 0 | 7 | 0 | 0 | 0 | 0 | 4 | 4 | 15 | 15 | 0 |
| | Foreign | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 3 |
| | Subtotal | 0 | 7 | 0 | 0 | 0 | 0 | 4 | 4 | 15 | 15 | 3 |
| | First year | 0 | 6 | 0 | 0 | 0 | 0 | 2 | 1 | 9 | 9 | 3 |
| | Beyond | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 3 | 6 | 6 | 0 |
| Graduate research assistantships | U.S. | 0 | 0 | 0 | 2 | 0 | 0 | 6 | 2 | 10 | 34 | |
| | Foreign | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 8 | 0 |
| | Subtotal | 0 | 0 | 0 | 2 | 0 | 1 | 7 | 2 | 12 | 42 | 0 |
| | First year | 0 | 0 | 0 | 1 | 0 | 0 | 3 | 1 | 5 | 25 | 0 |
| | Beyond | 0 | 0 | 0 | 1 | 0 | 1 | 4 | 1 | 7 | 17 | 0 |
| Graduate teaching assistantships | U.S. | | | | 0 | 0 | | 11 | 0 | 11 | 509 | |
| | Foreign | | | | 0 | 0 | | 2 | 0 | 2 | 53 | |
| | Subtotal | | | | 0 | 0 | | 13 | 0 | 13 | 562 | |
| | First year | | | | 0 | 0 | | 7 | 0 | 7 | 315 | |
| | Beyond | | | | 0 | 0 | | 6 | 0 | 6 | 247 | |
| Other types of support | U.S. | 0 | 123 | 0 | 0 | 0 | 0 | 7 | 4 | 134 | 20 | |
| | Foreign | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 2 | 21 | 2 | 18 |
| | Subtotal | 0 | 142 | 0 | 0 | 0 | 0 | 7 | 6 | 155 | 22 | 18 |
| | First year | 0 | 71 | 0 | 0 | 0 | 0 | 7 | 5 | 83 | 11 | 10 |
| | Beyond | 0 | 71 | 0 | 0 | 0 | 0 | 0 | 1 | 72 | 11 | 8 |
| **All types, total** | | 0 | 149 | 0 | 2 | 0 | 1 | 31 | 12 | 195 | 641 | 21 |
| Men | First year | 0 | 77 | 0 | 0 | 0 | 0 | 12 | 6 | 95 | 250 | 7 |
| | Beyond | 0 | 71 | 0 | 1 | 0 | 1 | 10 | 5 | 88 | 196 | 5 |
| Women | First year | 0 | 0 | 0 | 1 | 0 | 0 | 7 | 1 | 9 | 110 | 6 |
| | Beyond | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 3 | 85 | 3 |

| Part-time Graduate Students Fall 1973 | | |
|---|---|---|
| First year | Beyond first | Total |
| 978 | 630 | 1,608 |

| Postdoctorals and/or Research Asso Fall 1973 | | | |
|---|---|---|---|
| Source of support | | | |
| U.S. Government | | Non-U.S. Government | |
| Fellowships/ traineeships | Research associates | | |
| 0 | 0 | 0 | |

[1] Includes institution's and State and local governments
[2] Includes support from nonprofit institutions, industry, and all other U.S. sources
[3] Since 1969

**ence Student Support, Fall 1973**
**ental Data Sheet**

## TABLE IV-12
## SUMMARY OF RESPONSES FROM 83 MASTER'S DEPARTMENTS IN THE MATHEMATICAL SCIENCES

| ip and | U.S. Government Source (excl. loans) | | | | | | | | | Non-Government Source | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | HEW | | | | | | | | | | | | |
| | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | Institutional support[1] | Foreign sources | Other U.S. sources[2] | Self, loans, and family | Total | Grand total |
| | 0 | 7 | 0 | 0 | 0 | 0 | 4 | 4 | 15 | 15 | 0 | 5 | | 20 | 35 |
| | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 3 | 0 | | 3 | 3 |
| | 0 | 7 | 0 | 0 | 0 | 0 | 4 | 4 | 15 | 15 | 3 | 5 | | 23 | 38 |
| | 0 | 6 | 0 | 0 | 0 | 0 | 2 | 1 | 9 | 9 | 3 | 2 | | 14 | 23 |
| | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 3 | 6 | 6 | 0 | 3 | | 9 | 15 |
| | 0 | 0 | 0 | 2 | 0 | 0 | 6 | 2 | 10 | 34 | | 4 | | 38 | 48 |
| | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 8 | 0 | 1 | | 9 | 11 |
| | 0 | 0 | 0 | 2 | 0 | 1 | 7 | 2 | 12 | 42 | 0 | 5 | | 47 | 59 |
| | 0 | 0 | 0 | 1 | 0 | 0 | 3 | 1 | 5 | 25 | 0 | 2 | | 27 | 32 |
| | 0 | 0 | 0 | 1 | 0 | 1 | 4 | 1 | 7 | 17 | 0 | 3 | | 20 | 27 |
| | | | | 0 | 0 | | 11 | 0 | 11 | 509 | | 5 | | 514 | 525 |
| | | | | 0 | 0 | | 2 | 0 | 2 | 53 | | 0 | | 53 | 55 |
| | | | | 0 | 0 | | 13 | 0 | 13 | 562 | | 5 | | 567 | 580 |
| | | | | 0 | 0 | | 7 | 0 | 7 | 315 | | 4 | | 319 | 326 |
| | | | | 0 | 0 | | 6 | 0 | 6 | 247 | | 1 | | 248 | 254 |
| | 0 | 123 | 0 | 0 | 0 | 0 | 7 | 4 | 134 | 20 | | 6 | 336 | 362 | 496 |
| | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 2 | 21 | 2 | 18 | 0 | 53 | 73 | 94 |
| | 0 | 142 | 0 | 0 | 0 | 0 | 7 | 6 | 155 | 22 | 18 | 6 | 389 | 435 | 590 |
| | 0 | 71 | 0 | 0 | 0 | 0 | 7 | 5 | 83 | 11 | 10 | 1 | 201 | 223 | 306 |
| | 0 | 71 | 0 | 0 | 0 | 0 | 0 | 1 | 72 | 11 | 8 | 5 | 188 | 212 | 284 |
| | 0 | 149 | 0 | 2 | 0 | 1 | 31 | 12 | 195 | 641 | 21 | 21 | 389 | 1,072 | 1,267 |
| | 0 | 77 | 0 | 0 | 0 | 0 | 12 | 6 | 95 | 250 | 7 | 7 | 139 | 403 | 498 |
| | 0 | 71 | 0 | 1 | 0 | 1 | 10 | 5 | 88 | 196 | 5 | 12 | 137 | 350 | 438 |
| | 0 | 0 | 0 | 1 | 0 | 0 | 7 | 1 | 9 | 110 | 6 | 2 | 62 | 180 | 189 |
| | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 3 | 85 | 3 | 0 | 51 | 139 | 142 |

| ime Graduate Students Fall 1973 | |
|---|---|
| Beyond first | Total |
| 630 | 1,608 |

ts
, and all other U.S. sources.

| Postdoctorals and/or Research Associates Fall 1973 | | | | |
|---|---|---|---|---|
| Source of support | | | | |
| U.S. Government | | | | |
| Fellowships/ traineeships | Research associates | Non-U.S. Government | Total | Recent doctorals[3] |
| 0 | 0 | 0 | 0 | 0 |

**Survey of Graduate Science Student Support, Fall 1973**
**Departmental Data Sheet**

**TABLE IV-13**
**SUMMARY OF RESPONSES FROM 170 MAS**
**DEPARTMENTS IN THE LIFE SCIENCE**

| Type of support | Citizenship and level | U.S. Government Source (excl. loans) | | | | | | | | | Non-Governm | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | HEW | | | | | | | | | |
| | | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | Institutional support[1] | Foreign sources | O U sou |
| Fellowships and traineeships | U.S. | 0 | 0 | 0 | 47 | 94 | 1 | 3 | 39 | 184 | 80 | 1 | |
| | Foreign | | 0 | 0 | 3 | 0 | 0 | | 12 | 15 | 10 | 36 | |
| | Subtotal | 0 | 0 | 0 | 50 | 94 | 1 | 3 | 51 | 199 | 90 | 37 | |
| | First year | 0 | 0 | 0 | 21 | 16 | 0 | 1 | 25 | 63 | 38 | 23 | |
| | Beyond | 0 | 0 | 0 | 29 | 78 | 1 | 2 | 26 | 136 | 52 | 14 | |
| Graduate research assistantships | U.S. | 3 | 4 | 0 | 13 | 6 | 0 | 4 | 121 | 151 | 243 | | |
| | Foreign | 0 | 1 | 0 | 1 | 5 | 0 | 3 | 24 | 34 | 35 | 17 | |
| | Subtotal | 3 | 5 | 0 | 14 | 11 | 0 | 7 | 145 | 185 | 278 | 17 | |
| | First year | 1 | | 0 | 3 | 6 | 0 | 1 | 47 | 58 | 123 | 8 | |
| | Beyond | 2 | 5 | 0 | 11 | 5 | 0 | 6 | 98 | 127 | 155 | 9 | |
| Graduate teaching assistantships | U.S. | | | | | 3 | | 0 | 4 | 7 | 546 | | |
| | Foreign | | | | | 0 | | 0 | 5 | 5 | 49 | | |
| | Subtotal | | | | | 3 | | 0 | 9 | 12 | 595 | | |
| | First year | | | | | 2 | | 0 | 4 | 6 | 300 | | |
| | Beyond | | | | | 1 | | 0 | 5 | 6 | 295 | | |
| Other types of support | U.S. | 0 | 1 | 0 | 0 | 1 | 0 | 15 | 15 | 32 | 51 | | |
| | Foreign | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 7 | 5 | 22 | |
| | Subtotal | 0 | 1 | 0 | 0 | 1 | 0 | 15 | 22 | 39 | 56 | 22 | |
| | First year | 0 | 0 | 0 | 0 | 1 | 0 | 15 | 17 | 33 | 32 | 12 | |
| | Beyond | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 5 | 6 | 24 | 10 | |
| **All types, total** | | 3 | 6 | 0 | 64 | 109 | 1 | 25 | 227 | 435 | 1,019 | 76 | 1 |
| Men | First year | 1 | 0 | 0 | 9 | 7 | 0 | 11 | 78 | 106 | 355 | 38 | |
| | Beyond | 1 | 6 | 0 | 20 | 6 | 1 | 6 | 113 | 153 | 403 | 27 | |
| Women | First year | 0 | 0 | 0 | 15 | 18 | 0 | 6 | 15 | 54 | 138 | 5 | |
| | Beyond | 1 | 0 | 0 | 20 | 78 | 0 | 2 | 21 | 122 | 123 | 6 | |

| Part-time Graduate Students Fall 1973 | | |
|---|---|---|
| First year | Beyond first | Total |
| 374 | 472 | 846 |

| Postdoctorals and/or Research Associates Fall 1973 | | | |
|---|---|---|---|
| Source of support | | | |
| U.S. Government | | | |
| Fellowships/ traineeships | Research associates | Non-U.S. Government | Total |
| 17 | 45 | 25 | 87 |

[1] Includes institution's and State and local governments.
[2] Includes support from nonprofit institutions, industry, and all other U.S. sources.
[3] Since 1969.

## TABLE IV-13
## SUMMARY OF RESPONSES FROM 170 MASTER'S DEPARTMENTS IN THE LIFE SCIENCES

| p and | U.S. Government Source (excl. loans) | | | | | | | | | Non-Government Source | | | | | Grand total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | HEW | | | | | | | | | | | | |
| | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | Institutional support[1] | Foreign sources | Other U.S. sources[2] | Self, loans, and family | Total | |
| | 0 | 0 | 0 | 47 | 94 | 1 | 3 | 39 | 184 | 80 | 1 | 19 | | 100 | 284 |
| | | 0 | 0 | 3 | 0 | 0 | | 12 | 15 | 10 | 36 | 16 | | 62 | 77 |
| | 0 | 0 | 0 | 50 | 94 | 1 | 3 | 51 | 199 | 90 | 37 | 35 | | 162 | 361 |
| | 0 | 0 | 0 | 21 | 16 | 0 | 1 | 25 | 63 | 38 | 23 | 11 | | 72 | 135 |
| | 0 | 0 | 0 | 29 | 78 | 1 | 2 | 26 | 136 | 52 | 14 | 24 | | 90 | 226 |
| | 3 | 4 | 0 | 13 | 6 | 0 | 4 | 121 | 151 | 243 | | 38 | | 281 | 432 |
| | 0 | 1 | 0 | 1 | 5 | 0 | 3 | 24 | 34 | 35 | 17 | 6 | | 58 | 92 |
| | 3 | 5 | 0 | 14 | 11 | 0 | 7 | 145 | 185 | 278 | 17 | 44 | | 339 | 524 |
| | 1 | | 0 | 3 | 6 | 0 | 1 | 47 | 58 | 123 | 8 | 17 | | 148 | 206 |
| | 2 | 5 | 0 | 11 | 5 | 0 | 6 | 98 | 127 | 155 | 9 | 27 | | 191 | 318 |
| | | | | | 3 | | 0 | 4 | 7 | 546 | | | | 546 | 553 |
| | | | | | 0 | | 0 | 5 | 5 | 49 | | | | 49 | 54 |
| | | | | | 3 | | 0 | 9 | 12 | 595 | | | | 595 | 607 |
| | | | | | 2 | | 0 | 4 | 6 | 300 | | | | 300 | 306 |
| | | | | | 1 | | 0 | 5 | 6 | 295 | | | | 295 | 301 |
| | 0 | 1 | 0 | 0 | 1 | 0 | 15 | 15 | 32 | 51 | | 24 | 622 | 697 | 729 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 7 | 5 | 22 | 4 | 58 | 89 | 96 |
| | 0 | 1 | 0 | 0 | 1 | 0 | 15 | 22 | 39 | 56 | 22 | 28 | 680 | 786 | 825 |
| | 0 | 0 | 0 | 0 | 1 | 0 | 15 | 17 | 33 | 32 | 12 | 10 | 399 | 453 | 486 |
| | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 5 | 6 | 24 | 10 | 18 | 281 | 333 | 339 |
| | 3 | 6 | 0 | 64 | 109 | 1 | 25 | 227 | 435 | 1,019 | 76 | 107 | 680 | 1,882 | 2,317 |
| | 1 | 0 | 0 | 9 | 7 | 0 | 11 | 78 | 106 | 355 | 38 | 31 | 219 | 643 | 749 |
| | 1 | 6 | 0 | 20 | 6 | 1 | 6 | 113 | 153 | 403 | 27 | 55 | 217 | 702 | 855 |
| | 0 | 0 | 0 | 15 | 18 | 0 | 6 | 15 | 54 | 138 | 5 | 7 | 180 | 330 | 384 |
| | 1 | 0 | 0 | 20 | 78 | 0 | 2 | 21 | 122 | 123 | 6 | 14 | 64 | 207 | 329 |

| e Graduate Students Fall 1973 | |
|---|---|
| Beyond first | Total |
| 472 | 846 |

nd all other U.S. sources

| Postdoctorals and/or Research Associates Fall 1973 | | | | |
|---|---|---|---|---|
| Source of support | | | | |
| U.S. Government | | | | |
| Fellowships/ traineeships | Research associates | Non-U.S. Government | Total | Recent doctorals[3] |
| 17 | 45 | 25 | 87 | 41 |

**Survey of Graduate Science Student Support, Fall 1973**
**Departmental Data Sheet**

**TABLE IV-14**
**SUMMARY OF RESPONSES FR**
**35 MASTER'S DEPARTMENTS IN PSY**

| Type of support | Citizenship and level | U.S. Government Source (excl. loans) | | | | | | | | | Non-G | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | HEW | | | | | | | | |
| | | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | Insti-tutional support[1] | Foreig sourc |
| Fellowships and traineeships | U.S. | 0 | 0 | 0 | 3 | 7 | 0 | 0 | 0 | 10 | 15 | 6 |
| | Foreign | | 0 | 0 | 0 | 2 | 0 | | 0 | 2 | 1 | 1 |
| | Subtotal | 0 | 0 | 0 | 3 | 9 | 0 | 0 | 0 | 12 | 16 | 7 |
| | First year | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 13 | 4 |
| | Beyond | 0 | 0 | 0 | 2 | 9 | 0 | 0 | 0 | 11 | 3 | 3 |
| Graduate research assistantships | U.S. | 0 | 0 | 0 | 4 | 7 | 0 | 2 | 0 | 13 | 58 | |
| | Foreign | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 1 | 0 |
| | Subtotal | 0 | 0 | 0 | 6 | 7 | 0 | 2 | 0 | 15 | 59 | 0 |
| | First year | 0 | 0 | 0 | 3 | 2 | 0 | 1 | 0 | 6 | 25 | 0 |
| | Beyond | 0 | 0 | 0 | 3 | 5 | 0 | 1 | 0 | 9 | 34 | 0 |
| Graduate teaching assistantships | U.S. | | | | 0 | 2 | | 0 | 1 | 3 | 226 | |
| | Foreign | | | | 0 | 0 | | 0 | 0 | 0 | 2 | |
| | Subtotal | | | | 0 | 2 | | 0 | 1 | 3 | 228 | |
| | First year | | | | 0 | 2 | | 0 | 0 | 2 | 123 | |
| | Beyond | | | | 0 | 0 | | 0 | 1 | 1 | 105 | |
| Other types of support | U.S. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 21 | 55 | |
| | Foreign | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| | Subtotal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 21 | 55 | 11 |
| | First year | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 15 | 26 | 11 |
| | Beyond | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 6 | 29 | 0 |
| **All types, total** | | 0 | 0 | 0 | 9 | 18 | 0 | 2 | 22 | 51 | 358 | 18 |
| Men | First year | 0 | 0 | 0 | 3 | 2 | 0 | 0 | 15 | 20 | 105 | 9 |
| | Beyond | 0 | 0 | 0 | 3 | 5 | 0 | 1 | 7 | 16 | 106 | 1 |
| Women | First year | 0 | 0 | 0 | 1 | 2 | 0 | 1 | 0 | 4 | 82 | 6 |
| | Beyond | 0 | 0 | 0 | 2 | 9 | 0 | 0 | 0 | 11 | 65 | 2 |

| Part-time Graduate Students Fall 1973 | | |
|---|---|---|
| First year | Beyond first | Total |
| 77 | 185 | 262 |

| Postdoctorals and/or Research Asso Fall 1973 | | | |
|---|---|---|---|
| Source of support | | | |
| U.S. Government | | Non-U.S. Government | |
| Fellowships/ traineeships | Research associates | | |
| 0 | 0 | 0 | |

[1] Includes institution's and State and local governments.
[2] Includes support from nonprofit institutions, industry, and all other U.S. sources.
[3] Since 1969.

**Science Student Support, Fall 1973**
**rtmental Data Sheet**

## TABLE IV-14
## SUMMARY OF RESPONSES FROM
## 35 MASTER'S DEPARTMENTS IN PSYCHOLOGY

| enship and level | U.S. Government Source (excl. loans) | | | | | | | | | Non-Government Source | | | | | Grand total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | HEW | | | | | | | Institutional support[1] | Foreign sources | Other U.S. sources[2] | Self, loans, and family | Total | |
| | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | | | | | | |
| | 0 | 0 | 0 | 3 | 7 | 0 | 0 | 0 | 10 | 15 | 6 | 16 | | 37 | 47 |
| | | 0 | 0 | 0 | 2 | 0 | | 0 | 2 | 1 | 1 | 0 | | 2 | 4 |
| otal | 0 | 0 | 0 | 3 | 9 | 0 | 0 | 0 | 12 | 16 | 7 | 16 | | 39 | 51 |
| ar | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 13 | 4 | 7 | | 24 | 25 |
| | 0 | 0 | 0 | 2 | 9 | 0 | 0 | 0 | 11 | 3 | 3 | 9 | | 15 | 26 |
| | 0 | 0 | 0 | 4 | 7 | 0 | 2 | 0 | 13 | 58 | | 6 | | 64 | 77 |
| | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | | 1 | 3 |
| otal | 0 | 0 | 0 | 6 | 7 | 0 | 2 | 0 | 15 | 59 | 0 | 6 | | 65 | 80 |
| ar | 0 | 0 | 0 | 3 | 2 | 0 | 1 | 0 | 6 | 25 | 0 | 5 | | 30 | 36 |
| | 0 | 0 | 0 | 3 | 5 | 0 | 1 | 0 | 9 | 34 | 0 | 1 | | 35 | 44 |
| | | | | 0 | 2 | | 0 | 1 | 3 | 226 | | 1 | | 227 | 230 |
| | | | | 0 | 0 | | 0 | 0 | 0 | 2 | | 0 | | 2 | 2 |
| otal | | | | 0 | 2 | | 0 | 1 | 3 | 228 | | 1 | | 229 | 232 |
| ar | | | | 0 | 2 | | 0 | 0 | 2 | 123 | | 0 | | 123 | 125 |
| | | | | 0 | 0 | | 0 | 1 | 1 | 105 | | 1 | | 106 | 107 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 21 | 55 | | 1 | 571 | 627 | 648 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 20 | 31 | 31 |
| otal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 21 | 55 | 11 | 1 | 591 | 658 | 679 |
| ar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 15 | 26 | 11 | 1 | 300 | 338 | 353 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 6 | 29 | 0 | 0 | 291 | 320 | 326 |
| | 0 | 0 | 0 | 9 | 18 | 0 | 2 | 22 | 51 | 358 | 18 | 24 | 591 | 991 | 1,042 |
| ar | 0 | 0 | 0 | 3 | 2 | 0 | 0 | 15 | 20 | 105 | 9 | 8 | 188 | 310 | 330 |
| | 0 | 0 | 0 | 3 | 5 | 0 | 1 | 7 | 16 | 106 | 1 | 8 | 166 | 281 | 297 |
| ar | 0 | 0 | 0 | 1 | 2 | 0 | 1 | 0 | 4 | 82 | 6 | 5 | 112 | 205 | 209 |
| | 0 | 0 | 0 | 2 | 9 | 0 | 0 | 0 | 11 | 65 | 2 | 3 | 125 | 195 | 206 |

| Part-time Graduate Students Fall 1973 | | |
|---|---|---|
| year | Beyond first | Total |
| | 185 | 262 |

| Postdoctorals and/or Research Associates Fall 1973 | | | | |
|---|---|---|---|---|
| Source of support | | | | |
| U.S. Government | | | | |
| Fellowships/ traineeships | Research associates | Non-U.S. Government | Total | Recent doctorals[3] |
| 0 | 0 | 0 | 0 | 0 |

rnments.
ndustry, and all other U.S. sources

**Survey of Graduate Science Student Support, Fall 1973**
**Departmental Data Sheet**

**TABLE IV-15**
**SUMMARY OF RESPONSES FROM 269 M**
**DEPARTMENTS IN THE SOCIAL SCIE**

| Type of support | Citizenship and level | U.S. Government Source (excl. loans) | | | | | | | | | Non-Gover | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | HEW | | | | | | | | | |
| | | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | **Total** | Insti-tutional support[1] | Foreign sources | sc |
| Fellowships and traineeships | U.S. | 1 | 12 | 10 | 0 | 34 | 1 | 13 | 54 | 125 | 175 | 2 | |
| | Foreign | | 0 | 0 | 0 | 2 | 0 | | 11 | 13 | 23 | 11 | |
| | Subtotal | 1 | 12 | 10 | 0 | 36 | 1 | 13 | 65 | 138 | 198 | 13 | |
| | First year | 1 | 7 | 7 | 0 | 18 | 1 | 8 | 45 | 87 | 135 | 7 | |
| | Beyond | 0 | 5 | 3 | 0 | 18 | 0 | 5 | 20 | 51 | 63 | 6 | |
| Graduate research assistantships | U.S. | 0 | 1 | 0 | 0 | 16 | 2 | 19 | 93 | 131 | 352 | | |
| | Foreign | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 6 | 7 | 49 | 1 | |
| | Subtotal | 0 | 1 | 0 | 0 | 17 | 2 | 19 | 99 | 138 | 401 | 1 | |
| | First year | 0 | 1 | 0 | 0 | 4 | 1 | 14 | 53 | 73 | 266 | 0 | |
| | Beyond | 0 | 0 | 0 | 0 | 13 | 1 | 5 | 46 | 65 | 135 | 1 | |
| Graduate teaching assistantships | U.S. | | | | 0 | 1 | | 0 | 9 | 10 | 887 | | |
| | Foreign | | | | 0 | 0 | | 0 | 1 | 1 | 95 | | |
| | Subtotal | | | | 0 | 1 | | 0 | 10 | 11 | 982 | | |
| | First year | | | | 0 | 0 | | 0 | 9 | 9 | 570 | | |
| | Beyond | | | | 0 | 1 | | 0 | 1 | 2 | 412 | | |
| Other types of support | U.S. | 0 | 154 | 0 | 0 | 5 | 0 | 1 | 85 | 245 | 164 | | |
| | Foreign | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 15 | 9 | 24 | |
| | Subtotal | 0 | 154 | 0 | 0 | 5 | 0 | 1 | 100 | 260 | 173 | 24 | |
| | First year | 0 | 83 | 0 | 0 | 0 | 0 | 0 | 59 | 142 | 114 | 14 | |
| | Beyond | 0 | 71 | 0 | 0 | 5 | 0 | 1 | 41 | 118 | 59 | 10 | |
| **All types, total** | | 1 | 167 | 10 | 0 | 59 | 3 | 33 | 274 | 547 | 1,754 | 38 | 2 |
| Men | First year | 1 | 90 | 7 | 0 | 8 | 2 | 16 | 131 | 255 | 739 | 15 | 1 |
| | Beyond | 0 | 76 | 3 | 0 | 17 | 1 | 10 | 92 | 199 | 455 | 15 | |
| Women | First year | 0 | 1 | 0 | 0 | 14 | 0 | 6 | 35 | 56 | 346 | 6 | |
| | Beyond | 0 | 0 | 0 | 0 | 20 | 0 | 1 | 16 | 37 | 214 | 2 | |

| Part-time Graduate Students Fall 1973 | | |
|---|---|---|
| First year | Beyond first | Total |
| 1,447 | 1,618 | 3,065 |

| Postdoctorals and/or Research Associates Fall 1973 | | | |
|---|---|---|---|
| Source of support | | | |
| U.S. Government | | | |
| Fellowships/ traineeships | Research associates | Non-U.S. Government | Total |
| 4 | 3 | 20 | 27 |

[1] Includes institution's and State and local governments.
[2] Includes support from nonprofit institutions, industry, and all other U.S. sources.
[3] Since 1969.

e Student Support, Fall 1973
al Data Sheet

## TABLE IV-15
## SUMMARY OF RESPONSES FROM 269 MASTER'S DEPARTMENTS IN THE SOCIAL SCIENCES

| nd | U.S. Government Source (excl. loans) | | | | | | | | | Non-Government Source | | | | | Grand total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | HEW | | | | | | | | | | | | |
| | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | Institutional support[1] | Foreign sources | Other U.S. sources[2] | Self, loans, and family | Total | |
| | 1 | 12 | 10 | 0 | 34 | 1 | 13 | 54 | 125 | 175 | 2 | 69 | | 246 | 371 |
| | | 0 | 0 | 0 | 2 | 0 | | 11 | 13 | 23 | 11 | 6 | | 40 | 53 |
| | 1 | 12 | 10 | 0 | 36 | 1 | 13 | 65 | 138 | 198 | 13 | 75 | | 286 | 424 |
| | 1 | 7 | 7 | 0 | 18 | 1 | 8 | 45 | 87 | 135 | 7 | 59 | | 201 | 288 |
| | 0 | 5 | 3 | 0 | 18 | 0 | 5 | 20 | 51 | 63 | 6 | 16 | | 85 | 136 |
| | 0 | 1 | 0 | 0 | 16 | 2 | 19 | 93 | 131 | 352 | | 34 | | 386 | 517 |
| | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 6 | 7 | 49 | 1 | 5 | | 55 | 62 |
| | 0 | 1 | 0 | 0 | 17 | 2 | 19 | 99 | 138 | 401 | 1 | 39 | | 441 | 579 |
| | 0 | 1 | 0 | 0 | 4 | 1 | 14 | 53 | 73 | 266 | 0 | 30 | | 296 | 369 |
| | 0 | 0 | 0 | 0 | 13 | 1 | 5 | 46 | 65 | 135 | 1 | 9 | | 145 | 210 |
| | | | | 0 | 1 | | 0 | 9 | 10 | 887 | | 9 | | 896 | 906 |
| | | | | 0 | 0 | | 0 | 1 | 1 | 95 | | 0 | | 95 | 96 |
| | | | | 0 | 1 | | 0 | 10 | 11 | 982 | | 9 | | 991 | 1,002 |
| | | | | 0 | 0 | | 0 | 9 | 9 | 570 | | 2 | | 572 | 581 |
| | | | | 0 | 1 | | 0 | 1 | 2 | 412 | | 7 | | 419 | 421 |
| | 0 | 154 | 0 | 0 | 5 | 0 | 1 | 85 | 245 | 164 | | 83 | 1,797 | 2,044 | 2,289 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 15 | 9 | 24 | 4 | 175 | 212 | 227 |
| | 0 | 154 | 0 | 0 | 5 | 0 | 1 | 100 | 260 | 173 | 24 | 87 | 1,972 | 2,256 | 2,516 |
| | 0 | 83 | 0 | 0 | 0 | 0 | 0 | 59 | 142 | 114 | 14 | 49 | 1,160 | 1,337 | 1,479 |
| | 0 | 71 | 0 | 0 | 5 | 0 | 1 | 41 | 118 | 59 | 10 | 38 | 812 | 919 | 1,037 |
| | 1 | 167 | 10 | 0 | 59 | 3 | 33 | 274 | 547 | 1,754 | 38 | 210 | 1,972 | 3,974 | 4,521 |
| | 1 | 90 | 7 | 0 | 8 | 2 | 16 | 131 | 255 | 739 | 15 | 108 | 800 | 1,662 | 1,917 |
| | 0 | 76 | 3 | 0 | 17 | 1 | 10 | 92 | 199 | 455 | 15 | 53 | 635 | 1,158 | 1,357 |
| | 0 | 1 | 0 | 0 | 14 | 0 | 6 | 35 | 56 | 346 | 6 | 32 | 360 | 744 | 800 |
| | 0 | 0 | 0 | 0 | 20 | 0 | 1 | 16 | 37 | 214 | 2 | 17 | 177 | 410 | 447 |

| Graduate Students Fall 1973 | |
|---|---|
| eyond first | Total |
| 1,618 | 3,065 |

| Postdoctorals and/or Research Associates Fall 1973 | | | | |
|---|---|---|---|---|
| Source of support | | | | |
| U.S. Government | | | | |
| Fellowships/ traineeships | Research associates | Non-U.S. Government | Total | Recent doctorals[3] |
| 4 | 3 | 20 | 27 | 7 |

all other U.S. sources.

**Survey of Graduate Science Student Support, Fall 1973**
**Departmental Data Sheet**

**TABLE IV-16**
**SUMMARY OF RESPONSES FROM 2**
**DEPARTMENTS IN ALL OTHER SC**

| Type of support | Citizenship and level | U.S. Government Source (excl. loans) | | | | | | | | | Non- | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | HEW | | | | | | | | |
| | | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | Insti-tutional support[1] | Forei sourc |
| Fellowships and traineeships | U.S. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| | Foreign | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 |
| | Subtotal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| | First year | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| | Beyond | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Graduate research assistantships | U.S. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | Foreign | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Subtotal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | First year | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Beyond | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Graduate teaching assistantships | U.S. | | | | 0 | 0 | | 0 | 0 | 0 | 0 | |
| | Foreign | | | | 0 | 0 | | 0 | 0 | 0 | 0 | |
| | Subtotal | | | | 0 | 0 | | 0 | 0 | 0 | 0 | |
| | First year | | | | 0 | 0 | | 0 | 0 | 0 | 0 | |
| | Beyond | | | | 0 | 0 | | 0 | 0 | 0 | 0 | |
| Other types of support | U.S. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 4 | |
| | Foreign | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Subtotal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 4 | 0 |
| | First year | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 |
| | Beyond | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 |
| **All types, total** | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 6 | 0 |
| Men | First year | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 |
| | Beyond | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 |
| Women | First year | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| | Beyond | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| Part-time Graduate Students Fall 1973 | | |
|---|---|---|
| First year | Beyond first | Total |
| 1 | 0 | 1 |

| Postdoctorals and/or Research Asso Fall 1973 | | |
|---|---|---|
| Source of support | | |
| U.S. Government | | |
| Fellowships/ traineeships | Research associates | Non-U.S. Government |
| 0 | 0 | 0 |

[1] Includes institution's and State and local governments.
[2] Includes support from nonprofit institutions, industry, and all other U.S. sources.
[3] Since 1969.

cience Student Support, Fall 1973
mental Data Sheet

## TABLE IV-16
## SUMMARY OF RESPONSES FROM 2 MASTER'S DEPARTMENTS IN ALL OTHER SCIENCES

| nship and evel | U.S. Government Source (excl. loans) | | | | | | | | | Non-Government Source | | | | | Grand total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | HEW | | | | | | | | | | | | |
| | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | Institutional support[1] | Foreign sources | Other U.S. sources[2] | Self, loans, and family | Total | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | | 2 | 2 |
| | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 1 | | 1 | 1 |
| otal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | | 3 | 3 |
| r | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | | 3 | 3 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 |
| otal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 |
| | | | | 0 | 0 | | 0 | 0 | 0 | 0 | | 0 | | 0 | 0 |
| | | | | 0 | 0 | | 0 | 0 | 0 | 0 | | 0 | | 0 | 0 |
| otal | | | | 0 | 0 | | 0 | 0 | 0 | 0 | | 0 | | 0 | 0 |
| | | | | 0 | 0 | | 0 | 0 | 0 | 0 | | 0 | | 0 | 0 |
| | | | | 0 | 0 | | 0 | 0 | 0 | 0 | | 0 | | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 4 | | 0 | 7 | 11 | 12 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 |
| otal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 4 | 0 | 0 | 8 | 12 | 13 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 8 | 12 | 12 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 6 | 0 | 1 | 8 | 15 | 16 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 1 | 7 | 12 | 12 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 3 | 3 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| art-time Graduate Students Fall 1973 | | |
|---|---|---|
| ear | Beyond first | Total |
| | 0 | 1 |

nments.
dustry, and all other U.S. sources.

| Postdoctorals and/or Research Associates Fall 1973 | | | | |
|---|---|---|---|---|
| Source of support | | | | |
| U.S. Government | | | | |
| Fellowships/ traineeships | Research associates | Non-U.S. Government | Total | Recent doctorals[3] |
| 0 | 0 | 0 | 0 | 0 |

**Survey of Graduate Science Student Support, Fall 1973**
**Departmental Data Sheet**

**TABLE IV-17**
**SUMMARY OF RESPONSES FROM**
**5,683 DOCTORATE DEPARTMENTS**

| Type of support | Citizenship and level | U.S. Government Source (excl. loans) | | | | | | | | | Non-Govern | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | HEW | | | | | | | | | |
| | | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | Insti-tutional support[1] | Foreign sources | C U sou |
| Fellowships and traineeships | U.S. | 176 | 256 | 1,631 | 6,845 | 2,844 | 47 | 2,509 | 2,283 | 16,591 | 8,078 | 96 | 2 |
| | Foreign | | 5 | 9 | 179 | 57 | 9 | | 710 | 969 | 1,484 | 1,988 | |
| | Subtotal | 176 | 261 | 1,640 | 7,024 | 2,901 | 56 | 2,509 | 2,993 | 17,560 | 9,562 | 2,084 | 3 |
| | First year | 55 | 122 | 144 | 831 | 825 | 17 | 623 | 1,268 | 3,885 | 3,802 | 807 | 1 |
| | Beyond | 121 | 139 | 1,496 | 6,193 | 2,076 | 39 | 1,886 | 1,725 | 13,675 | 5,760 | 1,277 | 2 |
| Graduate research assistantships | U.S. | 1,007 | 1,592 | 33 | 2,267 | 629 | 830 | 4,928 | 3,462 | 14,748 | 8,698 | | 2 |
| | Foreign | 315 | 766 | 4 | 669 | 96 | 302 | 1,893 | 1,278 | 5,323 | 2,356 | 133 | |
| | Subtotal | 1,322 | 2,358 | 37 | 2,936 | 725 | 1,132 | 6,821 | 4,740 | 20,071 | 11,054 | 133 | 3 |
| | First year | 150 | 546 | 7 | 515 | 167 | 277 | 1,135 | 1,105 | 3,902 | 3,244 | 47 | |
| | Beyond | 1,172 | 1,812 | 30 | 2,421 | 558 | 855 | 5,686 | 3,635 | 16,169 | 7,810 | 86 | 2 |
| Graduate teaching assistantships | U.S. | | | | 40 | 60 | | 55 | 71 | 226 | 32,773 | | |
| | Foreign | | | | 10 | 10 | | 17 | 16 | 53 | 6,541 | | |
| | Subtotal | | | | 50 | 70 | | 72 | 87 | 279 | 39,314 | | |
| | First year | | | | 14 | 22 | | 20 | 33 | 89 | 12,306 | | |
| | Beyond | | | | 36 | 48 | | 52 | 54 | 190 | 27,008 | | |
| Other types of support | U.S. | 44 | 1,412 | 9 | 86 | 39 | 27 | 86 | 1,332 | 3,035 | 2,701 | | 2 |
| | Foreign | 4 | 171 | 0 | 12 | 3 | 9 | 26 | 166 | 391 | 527 | 1,229 | |
| | Subtotal | 48 | 1,583 | 9 | 98 | 42 | 36 | 112 | 1,498 | 3,426 | 3,228 | 1,229 | 2 |
| | First year | 21 | 615 | 1 | 35 | 6 | 10 | 26 | 550 | 1,264 | 1,058 | 578 | |
| | Beyond | 27 | 968 | 8 | 63 | 36 | 26 | 86 | 948 | 2,162 | 2,170 | 651 | 1 |
| **All types, total** | | 1,546 | 4,202 | 1,686 | 10,100 | 3,738 | 1,224 | 9,514 | 9,318 | 41,336 | 63,158 | 3,446 | 9 |
| Men | First year | 210 | 1,242 | 108 | 978 | 644 | 286 | 1,552 | 2,604 | 7,624 | 16,135 | 1,297 | 2 |
| | Beyond | 1,234 | 2,820 | 1,229 | 6,457 | 1,744 | 889 | 6,862 | 5,627 | 26,862 | 34,653 | 1,843 | 5 |
| Women | First year | 16 | 41 | 44 | 417 | 376 | 18 | 252 | 352 | 1,516 | 4,275 | 135 | |
| | Beyond | 86 | 99 | 305 | 2,256 | 974 | 31 | 848 | 735 | 5,334 | 8 095 | 171 | 1 |

| Part-time Graduate Students Fall 1973 | | |
|---|---|---|
| First year | Beyond first | Total |
| 15,414 | 28,218 | 43,632 |

| Postdoctorals and/or Research Associates Fall 1973 | | | |
|---|---|---|---|
| Source of support | | | |
| U.S. Government | | | |
| Fellowships/ traineeships | Research associates | Non-U.S. Government | Total |
| 4,573 | 6,630 | 5,011 | 16,214 |

[1] Includes institution's and State and local governments.
[2] Includes support from nonprofit institutions, industry, and all other U.S. sources.
[3] Since 1969.

**nce Student Support, Fall 1973**
**ntal Data Sheet**

## TABLE IV-17
## SUMMARY OF RESPONSES FROM 5,683 DOCTORATE DEPARTMENTS

| p and | U.S. Government Source (excl. loans) | | | | | | | | | Non-Government Source | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | HEW | | | | | | | | | | | | |
| | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | Institutional support[1] | Foreign sources | Other U.S. sources[2] | Self, loans, and family | Total | Grand total |
| ..... | 176 | 256 | 1,631 | 6,845 | 2,844 | 47 | 2,509 | 2,283 | 16,591 | 8,078 | 96 | 2,918 | | 11,092 | 27,683 |
| ..... | | 5 | 9 | 179 | 57 | 9 | | 710 | 969 | 1,484 | 1,988 | 842 | | 4,314 | 5,283 |
| ..... | 176 | 261 | 1,640 | 7,024 | 2,901 | 56 | 2,509 | 2,993 | 17,560 | 9,562 | 2,084 | 3,760 | | 15,406 | 32,966 |
| ..... | 55 | 122 | 144 | 831 | 825 | 17 | 623 | 1,268 | 3,885 | 3,802 | 807 | 1,132 | | 5,741 | 9,626 |
| ..... | 121 | 139 | 1,496 | 6,193 | 2,076 | 39 | 1,886 | 1,725 | 13,675 | 5,760 | 1,277 | 2,628 | | 9,665 | 23,340 |
| ..... | 1,007 | 1,592 | 33 | 2,267 | 629 | 830 | 4,928 | 3,462 | 14,748 | 8,698 | | 2,311 | | 11,009 | 25,757 |
| ..... | 315 | 766 | 4 | 669 | 96 | 302 | 1,893 | 1,278 | 5,323 | 2,356 | 133 | 691 | | 3,180 | 8,503 |
| ..... | 1,322 | 2,358 | 37 | 2,936 | 725 | 1,132 | 6,821 | 4,740 | 20,071 | 11,054 | 133 | 3,002 | | 14,189 | 34,260 |
| ..... | 150 | 546 | 7 | 515 | 167 | 277 | 1,135 | 1,105 | 3,902 | 3,244 | 47 | 937 | | 4,228 | 8,130 |
| ..... | 1,172 | 1,812 | 30 | 2,421 | 558 | 855 | 5,686 | 3,635 | 16,169 | 7,810 | 86 | 2,065 | | 9,961 | 26,130 |
| ..... | | | | 40 | 60 | | 55 | 71 | 226 | 32,773 | | 205 | | 32,978 | 33,204 |
| ..... | | | | 10 | 10 | | 17 | 16 | 53 | 6,541 | | 50 | | 6,591 | 6,644 |
| ..... | | | | 50 | 70 | | 72 | 87 | 279 | 39,314 | | 255 | | 39,569 | 39,848 |
| ..... | | | | 14 | 22 | | 20 | 33 | 89 | 12,306 | | 88 | | 12,394 | 12,483 |
| ..... | | | | 36 | 48 | | 52 | 54 | 190 | 27,008 | | 167 | | 27,175 | 27,365 |
| ..... | 44 | 1,412 | 9 | 86 | 39 | 27 | 86 | 1,332 | 3,035 | 2,701 | | 2,227 | 27,955 | 32,883 | 35,918 |
| ..... | 4 | 171 | 0 | 12 | 3 | 9 | 26 | 166 | 391 | 527 | 1,229 | 316 | 6,154 | 8,226 | 8,617 |
| ..... | 48 | 1,583 | 9 | 98 | 42 | 36 | 112 | 1,498 | 3,426 | 3,228 | 1,229 | 2,543 | 34,109 | 41,109 | 44,535 |
| ..... | 21 | 615 | 1 | 35 | 6 | 10 | 26 | 550 | 1,264 | 1,058 | 578 | 811 | 14,870 | 17,317 | 18,581 |
| ..... | 27 | 968 | 8 | 63 | 36 | 26 | 86 | 948 | 2,162 | 2,170 | 651 | 1,732 | 19,239 | 23,792 | 25,954 |
| ..... | 1,546 | 4,202 | 1,686 | 10,108 | 3,738 | 1,224 | 9,514 | 9,318 | 41,336 | 63,158 | 3,446 | 9,560 | 34,109 | 110,273 | 151,609 |
| ..... | 210 | 1,242 | 108 | 978 | 644 | 286 | 1,552 | 2,604 | 7,624 | 16,135 | 1,297 | 2,485 | 11,484 | 31,401 | 39,025 |
| ..... | 1,234 | 2,820 | 1,229 | 6,457 | 1,744 | 889 | 6,862 | 5,627 | 26,862 | 34,653 | 1,843 | 5,531 | 14,991 | 57,018 | 83,880 |
| ..... | 16 | 41 | 44 | 417 | 376 | 18 | 252 | 352 | 1,516 | 4,275 | 135 | 483 | 3,386 | 8,279 | 9,795 |
| ..... | 86 | 99 | 305 | 2,256 | 974 | 31 | 848 | 735 | 5,334 | 8,095 | 171 | 1,061 | 4,248 | 13,575 | 18,909 |

**me Graduate Students**
**Fall 1973**

| | Beyond first | Total |
|---|---|---|
| | 28,218 | 43,632 |

s
, and all other U.S. sources

**Postdoctorals and/or Research Associates**
**Fall 1973**

| Source of support | | | | |
|---|---|---|---|---|
| U.S. Government | | | | |
| Fellowships/ traineeships | Research associates | Non-U.S. Government | Total | Recent doctorals[3] |
| 4,573 | 6,630 | 5,011 | 16,214 | 9,547 |

**Survey of Graduate Science Student Support, Fall 1973**
**Departmental Data Sheet**

**TABLE IV-18**
**SUMMARY OF RESPONSES FR**
**737 DOCTORATE DEPARTMENTS IN EN**

| Type of support | Citizenship and level | U.S. Government Source (excl. loans) | | | | | | | | | Non-G | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | HEW | | | | | | | | |
| | | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | Insti-tutional support[1] | Foreig source |
| Fellowships and traineeships | U.S. | 120 | 112 | 188 | 348 | 174 | 20 | 407 | 636 | 2,005 | 1,063 | 13 |
| | Foreign | | 3 | 1 | 21 | 6 | 2 | | 86 | 119 | 360 | 500 |
| | Subtotal | 120 | 115 | 189 | 369 | 180 | 22 | 407 | 722 | 2,124 | 1,423 | 513 |
| | First year | 53 | 59 | 12 | 44 | 121 | 10 | 137 | 486 | 922 | 760 | 231 |
| | Beyond | 67 | 56 | 177 | 325 | 59 | 12 | 270 | 236 | 1,202 | 663 | 282 |
| Graduate research assistantships | U.S. | 222 | 830 | 7 | 197 | 52 | 304 | 1,132 | 855 | 3,599 | 1,497 | |
| | Foreign | 134 | 562 | 1 | 99 | 33 | 214 | 966 | 704 | 2,713 | 891 | 23 |
| | Subtotal | 356 | 1,392 | 8 | 296 | 85 | 518 | 2,098 | 1,559 | 6,312 | 2,388 | 23 |
| | First year | 81 | 424 | 0 | 66 | 25 | 158 | 537 | 403 | 1,694 | 878 | 9 |
| | Beyond | 275 | 968 | 8 | 230 | 60 | 360 | 1,561 | 1,156 | 4,618 | 1,510 | 14 |
| Graduate teaching assistantships | U.S. | | | | 4 | 6 | | 9 | 18 | 37 | 2,872 | |
| | Foreign | | | | 8 | 0 | | 7 | 7 | 22 | 1,511 | |
| | Subtotal | | | | 12 | 6 | | 16 | 25 | 59 | 4,383 | |
| | First year | | | | 4 | 2 | | 8 | 11 | 25 | 1,760 | |
| | Beyond | | | | 8 | 4 | | 8 | 14 | 34 | 2,623 | |
| Other types of support | U.S. | 34 | 1,036 | 0 | 2 | 6 | 8 | 10 | 463 | 1,559 | 414 | |
| | Foreign | 4 | 161 | 0 | 0 | 0 | 7 | 9 | 38 | 219 | 193 | 554 |
| | Subtotal | 38 | 1,197 | 0 | 2 | 6 | 15 | 19 | 501 | 1,778 | 607 | 554 |
| | First year | 19 | 476 | 0 | 0 | 1 | 3 | 9 | 222 | 730 | 286 | 307 |
| | Beyond | 19 | 721 | 0 | 2 | 5 | 12 | 10 | 279 | 1,048 | 321 | 247 |
| **All types, total** | | 514 | 2,704 | 197 | 679 | 277 | 555 | 2,540 | 2,807 | 10,273 | 8,801 | 1,090 |
| Men | First year | 146 | 942 | 10 | 105 | 140 | 166 | 672 | 1,093 | 3,274 | 3,564 | 535 |
| | Beyond | 353 | 1,725 | 181 | 536 | 123 | 380 | 1,804 | 1,643 | 6,745 | 4,998 | 529 |
| Women | First year | 7 | 17 | 2 | 9 | 9 | 5 | 19 | 29 | 97 | 120 | 12 |
| | Beyond | 8 | 20 | 4 | 29 | 5 | 4 | 45 | 42 | 157 | 119 | 14 |

| Part-time Graduate Students Fall 1973 | | |
|---|---|---|
| First year | Beyond first | Total |
| 7,792 | 9,157 | 16,949 |

| Postdoctorals and/or Research Asso Fall 1973 | | |
|---|---|---|
| Source of support | | |
| U.S. Government | | |
| Fellowships/ traineeships | Research associates | Non-U.S. Government |
| 104 | 613 | 245 |

[1] Includes institution's and State and local governments.
[2] Includes support from nonprofit institutions, industry, and all other U.S. sources.
[3] Since 1969.

**Science Student Support, Fall 1973**
**rtmental Data Sheet**

## TABLE IV-18
## SUMMARY OF RESPONSES FROM
## 737 DOCTORATE DEPARTMENTS IN ENGINEERING

| enship and level | U.S. Government Source (excl. loans) | | | | | | | | | Non-Government Source | | | | | Grand total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | HEW | | | | | | | Insti-tutional support[1] | Foreign sources | Other U.S. sources[2] | Self, loans, and family | Total | |
| | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | | | | | | |
| | 120 | 112 | 188 | 348 | 174 | 20 | 407 | 636 | 2,005 | 1,063 | 13 | 713 | | 1,789 | 3,794 |
| | | 3 | 1 | 21 | 6 | 2 | | 86 | 119 | 360 | 500 | 176 | | 1,036 | 1,155 |
| total | 120 | 115 | 189 | 369 | 180 | 22 | 407 | 722 | 2,124 | 1,423 | 513 | 889 | | 2,825 | 4,949 |
| ar | 53 | 59 | 12 | 44 | 121 | 10 | 137 | 486 | 922 | 760 | 231 | 380 | | 1,371 | 2,293 |
| | 67 | 56 | 177 | 325 | 59 | 12 | 270 | 236 | 1,202 | 663 | 282 | 509 | | 1,454 | 2,656 |
| | 222 | 830 | 7 | 197 | 52 | 304 | 1,132 | 855 | 3,599 | 1,497 | | 799 | | 2,296 | 5,895 |
| | 134 | 562 | 1 | 99 | 33 | 214 | 966 | 704 | 2,713 | 891 | 23 | 391 | | 1,305 | 4,018 |
| total | 356 | 1,392 | 8 | 296 | 85 | 518 | 2,098 | 1,559 | 6,312 | 2,388 | 23 | 1,190 | | 3,601 | 9,913 |
| ar | 81 | 424 | 0 | 66 | 25 | 158 | 537 | 403 | 1,694 | 878 | 9 | 431 | | 1,318 | 3,012 |
| | 275 | 968 | 8 | 230 | 60 | 360 | 1,561 | 1,156 | 4,618 | 1,510 | 14 | 759 | | 2,283 | 6,901 |
| | | | | 4 | 6 | | 9 | 18 | 37 | 2,872 | | 33 | | 2,905 | 2,942 |
| | | | | 8 | 0 | | 7 | 7 | 22 | 1,511 | | 33 | | 1,544 | 1,566 |
| total | | | | 12 | 6 | | 16 | 25 | 59 | 4,383 | | 66 | | 4,449 | 4,508 |
| ar | | | | 4 | 2 | | 8 | 11 | 25 | 1,760 | | 18 | | 1,778 | 1,803 |
| | | | | 8 | 4 | | 8 | 14 | 34 | 2,623 | | 48 | | 2,671 | 2,705 |
| | 34 | 1,036 | 0 | 2 | 6 | 8 | 10 | 463 | 1,559 | 414 | | 517 | 4,068 | 4,999 | 6,558 |
| | 4 | 161 | 0 | 0 | 0 | 7 | 9 | 38 | 219 | 193 | 554 | 92 | 2,462 | 3,301 | 3,520 |
| total | 38 | 1,197 | 0 | 2 | 6 | 15 | 19 | 501 | 1,778 | 607 | 554 | 609 | 6,530 | 8,300 | 10,078 |
| ar | 19 | 476 | 0 | 0 | 1 | 3 | 9 | 222 | 730 | 286 | 307 | 331 | 3,465 | 4,389 | 5,119 |
| | 19 | 721 | 0 | 2 | 5 | 12 | 10 | 279 | 1,048 | 321 | 247 | 278 | 3,065 | 3,911 | 4,959 |
| | 514 | 2,704 | 197 | 679 | 277 | 555 | 2,540 | 2,807 | 10,273 | 8,801 | 1,090 | 2,754 | 6,530 | 19,175 | 29,448 |
| ar | 146 | 942 | 10 | 105 | 140 | 166 | 672 | 1,093 | 3,274 | 3,564 | 535 | 1,120 | 3,330 | 8,549 | 11,823 |
| | 353 | 1,725 | 181 | 536 | 123 | 380 | 1,804 | 1,643 | 6,745 | 4,998 | 529 | 1,556 | 2,970 | 10,053 | 16,798 |
| ar | 7 | 17 | 2 | 9 | 9 | 5 | 19 | 29 | 97 | 120 | 12 | 40 | 135 | 307 | 404 |
| | 8 | 20 | 4 | 29 | 5 | 4 | 45 | 42 | 157 | 119 | 14 | 38 | 95 | 266 | 423 |

| art-time Graduate Students Fall 1973 | | |
|---|---|---|
| ear | Beyond first | Total |
| 2 | 9,157 | 16,949 |

rnments
dustry, and all other U.S. sources

| Postdoctorals and/or Research Associates Fall 1973 | | | | |
|---|---|---|---|---|
| Source of support | | | | |
| U.S. Government | | Non-U.S. Government | Total | Recent doctorals[3] |
| Fellowships/ traineeships | Research associates | | | |
| 104 | 613 | 245 | 962 | 612 |

**Survey of Graduate Science Student Support, Fall 1973**
**Departmental Data Sheet**

**TABLE IV-19**
**SUMMARY OF RESPONSES FROM 585 DOCT**
**DEPARTMENTS IN THE PHYSICAL SCIEN**

| Type of support | Citizenship and level | U.S. Government Source (excl. loans) | | | | | | | | | Non-Governm | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | HEW | | | | | | | | | |
| | | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | Institutional support[1] | Foreign sources | O U sou |
| Fellowships and traineeships | U.S. | 21 | 28 | 291 | 204 | 14 | 5 | 545 | 130 | 1,238 | 1,164 | 19 | |
| | Foreign | | 0 | 0 | 11 | 1 | 3 | | 33 | 48 | 250 | 239 | |
| | Subtotal | 21 | 28 | 291 | 215 | 15 | 8 | 545 | 163 | 1,286 | 1,414 | 258 | |
| | First year | 1 | 10 | 13 | 3 | 3 | 1 | 123 | 63 | 217 | 531 | 91 | |
| | Beyond | 20 | 18 | 278 | 212 | 12 | 7 | 422 | 100 | 1,069 | 883 | 167 | |
| Graduate research assistantships | U.S. | 692 | 522 | 7 | 511 | 49 | 461 | 2,610 | 659 | 5,511 | 1,071 | | |
| | Foreign | 149 | 143 | 0 | 159 | 13 | 80 | 670 | 136 | 1,350 | 293 | 23 | |
| | Subtotal | 841 | 665 | 7 | 670 | 62 | 541 | 3,280 | 795 | 6,861 | 1,364 | 23 | |
| | First year | 53 | 61 | 0 | 24 | 13 | 90 | 303 | 108 | 652 | 196 | 6 | |
| | Beyond | 788 | 604 | 7 | 646 | 49 | 451 | 2,977 | 687 | 6,209 | 1,168 | 17 | |
| Graduate teaching assistantships | U.S. | | | | 0 | 3 | | 9 | 2 | 14 | 8,719 | | |
| | Foreign | | | | 0 | 0 | | 4 | 1 | 5 | 2,344 | | |
| | Subtotal | | | | 0 | 3 | | 13 | 3 | 19 | 11,063 | | |
| | First year | | | | 0 | 0 | | 4 | 1 | 5 | 3,970 | | |
| | Beyond | | | | 0 | 3 | | 9 | 2 | 14 | 7,093 | | |
| Other types of support | U.S. | 7 | 285 | 0 | 3 | 2 | 18 | 27 | 224 | 566 | 237 | | |
| | Foreign | 0 | 10 | 0 | 0 | 0 | 2 | 4 | 2 | 18 | 48 | 117 | |
| | Subtotal | 7 | 295 | 0 | 3 | 2 | 20 | 31 | 226 | 584 | 285 | 117 | |
| | First year | 1 | 101 | 0 | 0 | 1 | 6 | 3 | 63 | 175 | 86 | 34 | |
| | Beyond | 6 | 194 | 0 | 3 | 1 | 14 | 28 | 163 | 409 | 199 | 83 | |
| **All types, total** | | 869 | 988 | 298 | 888 | 82 | 569 | 3,869 | 1,187 | 8,750 | 14,126 | 398 | 1,1 |
| Men | First year | 48 | 162 | 10 | 21 | 16 | 93 | 385 | 219 | 954 | 4,102 | 117 | |
| | Beyond | 769 | 769 | 248 | 747 | 57 | 450 | 3,162 | 882 | 7,084 | 8,178 | 253 | |
| Women | First year | 7 | 10 | 3 | 6 | 1 | 4 | 48 | 16 | 95 | 681 | 14 | |
| | Beyond | 45 | 47 | 37 | 114 | 8 | 22 | 274 | 70 | 617 | 1,165 | 14 | |

| Part-time Graduate Students Fall 1973 | | |
|---|---|---|
| First year | Beyond first | Total |
| 850 | 3,028 | 3,878 |

| Postdoctorals and/or Research Associates Fall 1973 | | | |
|---|---|---|---|
| Source of support | | | |
| U.S. Government | | | |
| Fellowships/ traineeships | Research associates | Non-U.S. Government | Total |
| 489 | 2,679 | 938 | 4,106 |

[1] Includes institution's and State and local governments.
[2] Includes support from nonprofit institutions, industry, and all other U.S. sources.
[3] Since 1969.

udent Support, Fall 1973
ata Sheet

## TABLE IV-19
## SUMMARY OF RESPONSES FROM 585 DOCTORATE DEPARTMENTS IN THE PHYSICAL SCIENCES

| | U.S. Government Source (excl. loans) | | | | | | | | | Non-Government Source | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | HEW | | | | | | | | | | | | |
| | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | Institutional support[1] | Foreign sources | Other U.S. sources[2] | Self, loans, and family | Total | Grand total |
| | 21 | 28 | 291 | 204 | 14 | 5 | 545 | 130 | 1,238 | 1,164 | 19 | 457 | | 1,640 | 2,878 |
| | | 0 | 0 | 11 | 1 | 3 | | 33 | 48 | 250 | 239 | 85 | | 574 | 622 |
| | 21 | 28 | 291 | 215 | 15 | 8 | 545 | 163 | 1,286 | 1,414 | 258 | 542 | | 2,214 | 3,500 |
| | 1 | 10 | 13 | 3 | 3 | 1 | 123 | 63 | 217 | 531 | 91 | 108 | | 730 | 947 |
| | 20 | 18 | 278 | 212 | 12 | 7 | 422 | 100 | 1,069 | 883 | 167 | 434 | | 1,484 | 2,553 |
| | 692 | 522 | 7 | 511 | 49 | 461 | 2,610 | 659 | 5,511 | 1,071 | | 359 | | 1,430 | 6,941 |
| | 149 | 143 | 0 | 159 | 13 | 80 | 670 | 136 | 1,350 | 293 | 23 | 63 | | 379 | 1,729 |
| | 841 | 665 | 7 | 670 | 62 | 541 | 3,280 | 795 | 6,861 | 1,364 | 23 | 422 | | 1,809 | 8,670 |
| | 53 | 61 | 0 | 24 | 13 | 90 | 303 | 108 | 652 | 196 | 6 | 67 | | 269 | 921 |
| | 788 | 604 | 7 | 646 | 49 | 451 | 2,977 | 687 | 6,209 | 1,168 | 17 | 355 | | 1,540 | 7,749 |
| | | | | 0 | 3 | | 9 | 2 | 14 | 8,719 | | 36 | | 8,755 | 8,769 |
| | | | | 0 | 0 | | 4 | 1 | 5 | 2,344 | | 4 | | 2,348 | 2,353 |
| | | | | 0 | 3 | | 13 | 3 | 19 | 11,063 | | 40 | | 11,103 | 11,122 |
| | | | | 0 | 0 | | 4 | 1 | 5 | 3,970 | | 19 | | 3,989 | 3,994 |
| | | | | 0 | 3 | | 9 | 2 | 14 | 7,093 | | 21 | | 7,114 | 7,128 |
| | 7 | 285 | 0 | 3 | 2 | 18 | 27 | 224 | 566 | 237 | | 157 | 2,270 | 2,664 | 3,230 |
| | 0 | 10 | 0 | 0 | 0 | 2 | 4 | 2 | 18 | 48 | 117 | 15 | 453 | 633 | 651 |
| | 7 | 295 | 0 | 3 | 2 | 20 | 31 | 226 | 584 | 285 | 117 | 172 | 2,723 | 3,297 | 3,881 |
| | 1 | 101 | 0 | 0 | 1 | 6 | 3 | 63 | 175 | 86 | 34 | 46 | 896 | 1,062 | 1,237 |
| | 6 | 194 | 0 | 3 | 1 | 14 | 28 | 163 | 409 | 199 | 83 | 126 | 1,827 | 2,235 | 2,644 |
| | 869 | 988 | 298 | 888 | 82 | 569 | 3,869 | 1,187 | 8,750 | 14,126 | 398 | 1,176 | 2,723 | 18,423 | 27,173 |
| | 48 | 162 | 10 | 21 | 16 | 93 | 385 | 219 | 954 | 4,102 | 117 | 217 | 784 | 5,220 | 6,174 |
| | 769 | 769 | 248 | 747 | 57 | 450 | 3,162 | 882 | 7,084 | 8,178 | 253 | 859 | 1,625 | 10,915 | 17,999 |
| | 7 | 10 | 3 | 6 | 1 | 4 | 48 | 16 | 95 | 681 | 14 | 23 | 112 | 830 | 925 |
| | 45 | 47 | 37 | 114 | 8 | 22 | 274 | 70 | 617 | 1,165 | 14 | 77 | 202 | 1,458 | 2,075 |

| uate Students<br>973 | |
|---|---|
| d first | Total |
| 28 | 3,878 |

er U.S. sources

| Postdoctorals and/or Research Associates<br>Fall 1973 | | | | |
|---|---|---|---|---|
| Source of support | | | | |
| U.S. Government | | | | |
| Fellowships/ traineeships | Research associates | Non-U.S. Government | Total | Recent doctorals |
| 489 | 2,679 | 938 | 4,106 | 2,837 |

**Survey of Graduate Science Student Support, Fall 1973**
**Departmental Data Sheet**

**TABLE IV-20**
**SUMMARY OF RESPONSES FROM 256 DEPARTMENTS IN THE MATHEMATICA**

| Type of support | Citizenship and level | U.S. Government Source (excl. loans) | | | | | | | | | Non-G | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | HEW | | | | | | | | |
| | | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | Insti-tutional support[1] | Foreig sourc |
| Fellowships and traineeships | U.S. | 0 | 14 | 110 | 67 | 9 | 2 | 333 | 33 | 568 | 518 | 6 |
| | Foreign | 0 | 1 | 0 | 1 | 0 | 0 | | 10 | 12 | 131 | 143 |
| | Subtotal | 0 | 15 | 110 | 68 | 9 | 2 | 333 | 43 | 580 | 649 | 149 |
| | First year | 0 | 6 | 7 | 6 | 1 | 0 | 97 | 14 | 131 | 282 | 52 |
| | Beyond | 0 | 9 | 103 | 62 | 8 | 2 | 236 | 29 | 449 | 367 | 97 |
| Graduate research assistantships | U.S. | 25 | 142 | 1 | 37 | 4 | 5 | 288 | 77 | 579 | 310 | |
| | Foreign | 12 | 44 | 0 | 8 | 1 | 1 | 98 | 31 | 195 | 107 | 2 |
| | Subtotal | 37 | 186 | 1 | 45 | 5 | 6 | 386 | 108 | 774 | 417 | 2 |
| | First year | 3 | 37 | 0 | 13 | 1 | 4 | 84 | 18 | 160 | 100 | 1 |
| | Beyond | 34 | 149 | 1 | 32 | 4 | 2 | 302 | 90 | 614 | 317 | 1 |
| Graduate teaching assistantships | U.S. | | | | 1 | 0 | | 9 | 5 | 15 | 4,627 | |
| | Foreign | | | | 0 | 0 | | 4 | 0 | 4 | 964 | |
| | Subtotal | | | | 1 | 0 | | 13 | 5 | 19 | 5,591 | |
| | First year | | | | 0 | 0 | | 2 | 1 | 3 | 1,607 | |
| | Beyond | | | | 1 | 0 | | 11 | 4 | 16 | 3,984 | |
| Other types of support | U.S. | 0 | 12 | 0 | 1 | 0 | 1 | 9 | 87 | 110 | 171 | |
| | Foreign | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 9 | 14 | 68 | 68 |
| | Subtotal | 0 | 12 | 0 | 1 | 0 | 1 | 14 | 96 | 124 | 239 | 68 |
| | First year | 0 | 6 | 0 | 0 | 0 | 1 | 4 | 49 | 60 | 68 | 28 |
| | Beyond | 0 | 6 | 0 | 1 | 0 | 0 | 10 | 47 | 64 | 171 | 40 |
| **All types, total** | | 37 | 213 | 111 | 115 | 14 | 9 | 746 | 252 | 1,497 | 6,896 | 219 |
| Men | First year | 3 | 46 | 5 | 16 | 2 | 3 | 137 | 73 | 285 | 1,598 | 69 |
| | Beyond | 29 | 152 | 90 | 82 | 9 | 4 | 507 | 147 | 1,020 | 4,001 | 121 |
| Women | First year | 0 | 3 | 2 | 3 | 0 | 2 | 50 | 9 | 69 | 469 | 12 |
| | Beyond | 5 | 12 | 14 | 14 | 3 | 0 | 52 | 23 | 123 | 838 | 17 |

| Part-time Graduate Students Fall 1973 | | |
|---|---|---|
| First year | Beyond first | Total |
| 1,648 | 2,517 | 4,165 |

| Postdoctorals and/or Research Ass Fall 1973 | | | |
|---|---|---|---|
| Source of support | | | |
| U.S. Government | | Non-U.S. Government | |
| Fellowships/ traineeships | Research associates | | |
| 32 | 62 | 51 | |

[1] Includes institution's and State and local governments.
[2] Includes support from nonprofit institutions, industry, and all other U.S. sources.
[3] Since 1969.

ience Student Support, Fall 1973
nental Data Sheet

## TABLE IV-20
## SUMMARY OF RESPONSES FROM 256 DOCTORATE DEPARTMENTS IN THE MATHEMATICAL SCIENCES

| ship and vel | U.S. Government Source (excl. loans) | | | | | | | | | Non-Government Source | | | | | Grand total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | HEW | | | | | | | Insti-tutional support[1] | Foreign sources | Other U.S. sources[2] | Self, loans, and family | Total | |
| | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | | | | | | |
| | 0 | 14 | 110 | 67 | 9 | 2 | 333 | 33 | 568 | 518 | 6 | 102 | | 626 | 1,194 |
| | 0 | 1 | 0 | 1 | 0 | 0 | | 10 | 12 | 131 | 143 | 21 | | 295 | 307 |
| tal | 0 | 15 | 110 | 68 | 9 | 2 | 333 | 43 | 580 | 649 | 149 | 123 | | 921 | 1,501 |
| | 0 | 6 | 7 | 6 | 1 | 0 | 97 | 14 | 131 | 282 | 52 | 34 | | 368 | 499 |
| | 0 | 9 | 103 | 62 | 8 | 2 | 236 | 29 | 449 | 367 | 97 | 89 | | 553 | 1,002 |
| | 25 | 142 | 1 | 37 | 4 | 5 | 288 | 77 | 579 | 310 | | 13 | | 323 | 902 |
| | 12 | 44 | 0 | 8 | 1 | 1 | 98 | 31 | 195 | 107 | 2 | 11 | | 120 | 315 |
| tal | 37 | 186 | 1 | 45 | 5 | 6 | 386 | 108 | 774 | 417 | 2 | 24 | | 443 | 1,217 |
| | 3 | 37 | 0 | 13 | 1 | 4 | 84 | 18 | 160 | 100 | 1 | 7 | | 108 | 268 |
| | 34 | 149 | 1 | 32 | 4 | 2 | 302 | 90 | 614 | 317 | 1 | 17 | | 335 | 949 |
| | | | | 1 | 0 | | 9 | 5 | 15 | 4,627 | | 11 | | 4,638 | 4,653 |
| | | | | 0 | 0 | | 4 | 0 | 4 | 964 | | 1 | | 965 | 969 |
| tal | | | | 1 | 0 | | 13 | 5 | 19 | 5,591 | | 12 | | 5,603 | 5,622 |
| | | | | 0 | 0 | | 2 | 1 | 3 | 1,607 | | 3 | | 1,610 | 1,613 |
| | | | | 1 | 0 | | 11 | 4 | 16 | 3,984 | | 9 | | 3,993 | 4,009 |
| | 0 | 12 | 0 | 1 | 0 | 1 | 9 | 87 | 110 | 171 | | 271 | 1,906 | 2,348 | 2,458 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 9 | 14 | 68 | 68 | 49 | 498 | 683 | 697 |
| tal | 0 | 12 | 0 | 1 | 0 | 1 | 14 | 96 | 124 | 239 | 68 | 320 | 2,404 | 3,031 | 3,155 |
| | 0 | 6 | 0 | 0 | 0 | 1 | 4 | 49 | 60 | 68 | 28 | 111 | 1,061 | 1,268 | 1,328 |
| | 0 | 6 | 0 | 1 | 0 | 0 | 10 | 47 | 64 | 171 | 40 | 209 | 1,343 | 1,763 | 1,827 |
| | 37 | 213 | 111 | 115 | 14 | 9 | 746 | 252 | 1,497 | 6,896 | 219 | 479 | 2,404 | 9,998 | 11,495 |
| | 3 | 46 | 5 | 16 | 2 | 3 | 137 | 73 | 285 | 1,598 | 69 | 124 | 841 | 2,632 | 2,917 |
| | 29 | 152 | 90 | 82 | 9 | 4 | 507 | 147 | 1,020 | 4,001 | 121 | 274 | 1,099 | 5,495 | 6,515 |
| | 0 | 3 | 2 | 3 | 0 | 2 | 50 | 9 | 69 | 459 | 12 | 31 | 220 | 722 | 791 |
| | 5 | 12 | 14 | 14 | 3 | 0 | 52 | 23 | 123 | 838 | 17 | 50 | 244 | 1,149 | 1,272 |

t-time Graduate Students
Fall 1973

| ar | Beyond first | Total |
|---|---|---|
| | 2,517 | 4,165 |

ents
stry, and all other U.S. sources.

Postdoctorals and/or Research Associates
Fall 1973

| Source of support | | | | |
|---|---|---|---|---|
| U.S. Government | | | | |
| Fellowships/ traineeships | Research associates | Non-U.S. Government | Total | Recent doctorals[3] |
| 32 | 62 | 51 | 145 | 82 |

**Survey of Graduate Science Student Support, Fall 1973**
**Departmental Data Sheet**

**TABLE IV-21**
**SUMMARY OF RESPONSES FROM 3,252 DOC**
**DEPARTMENTS IN THE LIFE SCIENCE**

| Type of support | Citizenship and level | U.S. Government Source (excl. loans) | | | | | | | | | Non-Governm | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | HEW | | | | | | | | | |
| | | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | Insti-tutional support[1] | Foreign sources | O U sou |
| Fellowships and traineeships | U.S. | 32 | 54 | 306 | 4,908 | 839 | 17 | 517 | 507 | 7,180 | 2,036 | 24 | |
| | Foreign | | 0 | 0 | 134 | 25 | 4 | | 242 | 405 | 311 | 601 | |
| | Subtotal | 32 | 54 | 306 | 5,042 | 864 | 21 | 517 | 749 | 7,585 | 2,347 | 625 | |
| | First year | 1 | 24 | 19 | 539 | 227 | 5 | 107 | 284 | 1,206 | 945 | 254 | |
| | Beyond | 31 | 30 | 287 | 4,503 | 637 | 16 | 410 | 465 | 6,379 | 1,402 | 371 | |
| Graduate research assistantships | U.S. | 67 | 34 | 14 | 1,260 | 116 | 47 | 535 | 1,319 | 3,392 | 3,127 | | |
| | Foreign | 20 | 12 | 1 | 369 | 23 | 4 | 90 | 262 | 781 | 667 | 77 | |
| | Subtotal | 87 | 46 | 15 | 1,629 | 139 | 51 | 625 | 1,581 | 4,173 | 3,794 | 77 | |
| | First year | 13 | 9 | 4 | 337 | 36 | 20 | 139 | 398 | 956 | 1,093 | 28 | |
| | Beyond | 74 | 37 | 11 | 1,292 | 103 | 31 | 486 | 1,183 | 3,217 | 2,701 | 49 | |
| Graduate teaching assistantships | U.S. | | | | 34 | 15 | | 19 | 23 | 91 | 7,426 | | |
| | Foreign | | | | 2 | 8 | | 0 | 5 | 15 | 778 | | |
| | Subtotal | | | | 36 | 23 | | 19 | 28 | 106 | 8,204 | | |
| | First year | | | | 10 | 14 | | 6 | 9 | 39 | 2,623 | | |
| | Beyond | | | | 26 | 9 | | 13 | 19 | 67 | 5,581 | | |
| Other types of support | U.S. | 3 | 9 | 4 | 66 | 9 | 0 | 13 | 167 | 271 | 622 | | |
| | Foreign | 0 | 0 | 0 | 12 | 2 | 0 | 5 | 55 | 74 | 107 | 319 | |
| | Subtotal | 3 | 9 | 4 | 78 | 11 | 0 | 18 | 222 | 345 | 729 | 319 | |
| | First year | 1 | 2 | 0 | 31 | 3 | 0 | 8 | 77 | 122 | 287 | 131 | |
| | Beyond | 2 | 7 | 4 | 47 | 8 | 0 | 10 | 145 | 223 | 442 | 188 | |
| **All types, total** | | 122 | 109 | 325 | 6,785 | 1,037 | 72 | 1,179 | 2,580 | 12,209 | 15,074 | 1,021 | 2,3 |
| Men | First year | 13 | 33 | 15 | 649 | 163 | 20 | 209 | 652 | 1,754 | 3,539 | 358 | |
| | Beyond | 80 | 69 | 228 | 4,261 | 464 | 42 | 708 | 1,604 | 7,456 | 7,817 | 546 | 1,2 |
| Women | First year | 2 | 2 | 8 | 268 | 117 | 5 | 51 | 116 | 569 | 1,409 | 55 | |
| | Beyond | 27 | 5 | 74 | 1,607 | 293 | 5 | 211 | 208 | 2,430 | 2,309 | 62 | |

| Part-time Graduate Students Fall 1973 | | |
|---|---|---|
| First year | Beyond first | Total |
| 2,002 | 3,745 | 5,747 |

| Postdoctorals and/or Research Associates Fall 1973 | | | |
|---|---|---|---|
| Source of support | | | |
| U.S. Government | | | |
| Fellowships/ traineeships | Research associates | Non-U.S. Government | Total |
| 3,841 | 3,095 | 3,497 | 10,433 |

[1] Includes institution's and State and local governments.
[2] Includes support from nonprofit institutions, industry, and all other U.S. sources.
[3] Since 1969.

**ce Student Support, Fall 1973**
**tal Data Sheet**

## TABLE IV-21
## SUMMARY OF RESPONSES FROM 3,252 DOCTORATE DEPARTMENTS IN THE LIFE SCIENCES

| and | U.S. Government Source (excl. loans) | | | | | | | | | Non-Government Source | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | HEW | | | | | | | | | | | | |
| | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | Institutional support[1] | Foreign sources | Other U.S. sources[2] | Self, loans, and family | Total | Grand total |
| ..... | 32 | 54 | 306 | 4,908 | 839 | 17 | 517 | 507 | 7,180 | 2,036 | 24 | 593 | | 2,653 | 9,833 |
| ..... | | 0 | 0 | 134 | 25 | 4 | | 242 | 405 | 311 | 601 | 221 | | 1,133 | 1,538 |
| ..... | 32 | 54 | 306 | 5,042 | 864 | 21 | 517 | 749 | 7,585 | 2,347 | 625 | 814 | | 3,786 | 11,371 |
| ..... | 1 | 24 | 19 | 539 | 227 | 5 | 107 | 284 | 1,206 | 945 | 254 | 260 | | 1,459 | 2,665 |
| ..... | 31 | 30 | 287 | 4,503 | 637 | 16 | 410 | 465 | 6,379 | 1,402 | 371 | 554 | | 2,327 | 8,706 |
| ..... | 67 | 34 | 14 | 1,260 | 116 | 47 | 535 | 1,319 | 3,392 | 3,127 | | 821 | | 3,948 | 7,340 |
| ..... | 20 | 12 | 1 | 369 | 23 | 4 | 90 | 262 | 781 | 667 | 77 | 167 | | 911 | 1,692 |
| ..... | 87 | 46 | 15 | 1,629 | 139 | 51 | 625 | 1,581 | 4,173 | 3,794 | 77 | 988 | | 4,859 | 9,032 |
| ..... | 13 | 9 | 4 | 337 | 36 | 20 | 139 | 398 | 956 | 1,093 | 28 | 302 | | 1,423 | 2,379 |
| ..... | 74 | 37 | 11 | 1,292 | 103 | 31 | 486 | 1,183 | 3,217 | 2,701 | 49 | 686 | | 3,436 | 6,653 |
| ..... | | | | 34 | 15 | | 19 | 23 | 91 | 7,426 | | 69 | | 7,495 | 7,586 |
| ..... | | | | 2 | 8 | | 0 | 5 | 15 | 778 | | 10 | | 788 | 803 |
| ..... | | | | 36 | 23 | | 19 | 28 | 106 | 8,204 | | 79 | | 8,283 | 8,389 |
| ..... | | | | 10 | 14 | | 6 | 9 | 39 | 2,623 | | 33 | | 2,656 | 2,695 |
| ..... | | | | 26 | 9 | | 13 | 19 | 67 | 5,581 | | 46 | | 5,627 | 5,694 |
| ..... | 3 | 9 | 4 | 66 | 9 | 0 | 13 | 167 | 271 | 622 | | 374 | 7,086 | 8,082 | 8,353 |
| ..... | 0 | 0 | 0 | 12 | 2 | 0 | 5 | 55 | 74 | 107 | 319 | 113 | 946 | 1,485 | 1,559 |
| ..... | 3 | 9 | 4 | 78 | 11 | 0 | 18 | 222 | 345 | 729 | 319 | 487 | 8,032 | 9,567 | 9,912 |
| ..... | 1 | 2 | 0 | 31 | 3 | 0 | 8 | 77 | 122 | 287 | 131 | 181 | 4,103 | 4,702 | 4,824 |
| ..... | 2 | 7 | 4 | 47 | 8 | 0 | 10 | 145 | 223 | 442 | 188 | 306 | 3,929 | 4,865 | 5,088 |
| ..... | 122 | 109 | 325 | 6,785 | 1,037 | 72 | 1,179 | 2,580 | 12,209 | 15,074 | 1,021 | 2,368 | 8,032 | 26,495 | 38,704 |
| ..... | 13 | 33 | 15 | 649 | 163 | 20 | 209 | 652 | 1,754 | 3,539 | 358 | 594 | 2,885 | 7,376 | 9,130 |
| ..... | 80 | 69 | 228 | 4,261 | 464 | 42 | 708 | 1,604 | 7,456 | 7,817 | 546 | 1,296 | 2,927 | 12,586 | 20,042 |
| ..... | 2 | 2 | 8 | 268 | 117 | 5 | 51 | 116 | 569 | 1,409 | 55 | 182 | 1,218 | 2,864 | 3,433 |
| ..... | 27 | 5 | 74 | 1,607 | 293 | 5 | 211 | 208 | 2,430 | 2,309 | 62 | 296 | 1,002 | 3,669 | 6,099 |

| ) Graduate Students Fall 1973 | |
|---|---|
| Beyond first | Total |
| 3,745 | 5,747 |

d all other U.S. sources

| Postdoctorals and/or Research Associates Fall 1973 | | | | |
|---|---|---|---|---|
| Source of support | | | | |
| U.S. Government | | | | |
| Fellowships/ traineeships | Research associates | Non-U.S. Government | Total | Recent doctorals[3] |
| 3,841 | 3,095 | 3,497 | 10,433 | 5,768 |

**Survey of Graduate Science Student Support, Fall 1973**
**Departmental Data Sheet**

**TABLE IV-22**
**SUMMARY OF RESPONSES FROM 180 D**
**DEPARTMENTS IN PSYCHOLO**

| Type of support | Citizenship and level | U.S. Government Source (excl. loans) | | | | | | | | | Non-G | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | HEW | | | | | | | | |
| | | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | Insti-tutional support[1] | Foreig source |
| Fellowships and traineeships | U.S. | 1 | 17 | 115 | 823 | 1,183 | 2 | 227 | 437 | 2,805 | 821 | 1 |
| | Foreign | | 0 | 0 | 3 | 6 | 0 | | 20 | 29 | 48 | 25 |
| | Subtotal | 1 | 17 | 115 | 826 | 1,189 | 2 | 227 | 457 | 2,834 | 869 | 26 |
| | First year | 0 | 2 | 9 | 199 | 323 | 1 | 49 | 87 | 670 | 227 | 3 |
| | Beyond | 1 | 15 | 106 | 627 | 866 | 1 | 178 | 370 | 2,164 | 642 | 23 |
| Graduate research assistantships | U.S. | 0 | 48 | 1 | 210 | 292 | 5 | 120 | 162 | 838 | 811 | |
| | Foreign | 0 | 2 | 0 | 20 | 19 | | 9 | 5 | 55 | 27 | 1 |
| | Subtotal | 0 | 50 | 1 | 230 | 311 | 5 | 129 | 167 | 893 | 838 | 1 |
| | First year | 0 | 9 | 0 | 60 | 72 | 2 | 24 | 39 | 206 | 269 | 0 |
| | Beyond | 0 | 41 | 1 | 170 | 239 | 3 | 105 | 128 | 687 | 569 | 1 |
| Graduate teaching assistantships | U.S. | | | | 1 | 30 | | 4 | 1 | 36 | 2,957 | |
| | Foreign | | | | 0 | 1 | | 0 | 0 | 1 | 124 | |
| | Subtotal | | | | 1 | 31 | | 4 | 1 | 37 | 3,081 | |
| | First year | | | | 0 | 5 | | 0 | 0 | 5 | 771 | |
| | Beyond | | | | 1 | 26 | | 4 | 1 | 32 | 2,310 | |
| Other types of support | U.S. | 0 | 22 | 2 | 8 | 18 | 0 | 11 | 152 | 213 | 557 | |
| | Foreign | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 4 | 5 | 17 | 16 |
| | Subtotal | 0 | 22 | 2 | 8 | 19 | 0 | 11 | 156 | 218 | 574 | 16 |
| | First year | 0 | 8 | 0 | 2 | 0 | 0 | 0 | 34 | 44 | 109 | 3 |
| | Beyond | 0 | 14 | 2 | 6 | 19 | 0 | 11 | 122 | 174 | 465 | 13 |
| **All types, total** | | 1 | 89 | 118 | 1,065 | 1,550 | 7 | 371 | 781 | 3,982 | 5,362 | 43 |
| Men | First year | 0 | 14 | 5 | 152 | 236 | 1 | 41 | 104 | 553 | 813 | 4 |
| | Beyond | 1 | 61 | 69 | 521 | 728 | 4 | 197 | 435 | 2,016 | 2,631 | 22 |
| Women | First year | 0 | 5 | 4 | 109 | 164 | 2 | 32 | 56 | 372 | 563 | 2 |
| | Beyond | 0 | 9 | 40 | 283 | 422 | 0 | 101 | 186 | 1,041 | 1,355 | 15 |

| Part-time Graduate Students Fall 1973 | | |
|---|---|---|
| First year | Beyond first | Total |
| 592 | 2,364 | 2,956 |

| Postdoctorals and/or Research Ass Fall 1973 | | |
|---|---|---|
| Source of support | | |
| U.S. Government | | |
| Fellowships/ traineeships | Research associates | Non-U.S. Government |
| 54 | 76 | 60 |

[1] Includes institution's and State and local governments.
[2] Includes support from nonprofit institutions, industry, and all other U.S. sources.
[3] Since 1969.

**cience Student Support, Fall 1973**
**tmental Data Sheet**

## TABLE IV-22
## SUMMARY OF RESPONSES FROM 180 DOCTORATE DEPARTMENTS IN PSYCHOLOGY

| nship and level | U.S. Government Source (excl. loans) | | | | | | | | | Non-Government Source | | | | | Grand total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | HEW | | | | | | | | | | | | |
| | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | Institutional support[1] | Foreign sources | Other U.S. sources[2] | Self, loans, and family | Total | |
| | 1 | 17 | 115 | 823 | 1,183 | 2 | 227 | 437 | 2,805 | 821 | 1 | 222 | | 1,044 | 3,849 |
| | | 0 | 0 | 3 | 6 | 0 | | 20 | 29 | 48 | 25 | 9 | | 82 | 111 |
| total | 1 | 17 | 115 | 826 | 1,189 | 2 | 227 | 457 | 2,834 | 869 | 26 | 231 | | 1,126 | 3,960 |
| r | 0 | 2 | 9 | 199 | 323 | 1 | 49 | 87 | 670 | 227 | 3 | 41 | | 271 | 941 |
| | 1 | 15 | 106 | 627 | 866 | 1 | 178 | 370 | 2,164 | 642 | 23 | 190 | | 855 | 3,019 |
| | 0 | 48 | 1 | 210 | 292 | 5 | 120 | 162 | 838 | 811 | | 100 | | 911 | 1,749 |
| | 0 | 2 | 0 | 20 | 19 | | 9 | 5 | 55 | 27 | 1 | 4 | | 32 | 87 |
| total | 0 | 50 | 1 | 230 | 311 | 5 | 129 | 167 | 893 | 838 | 1 | 104 | | 943 | 1,836 |
| r | 0 | 9 | 0 | 60 | 72 | 2 | 24 | 39 | 206 | 269 | 0 | 44 | | 313 | 519 |
| | 0 | 41 | 1 | 170 | 239 | 3 | 105 | 128 | 687 | 569 | 1 | 60 | | 630 | 1,317 |
| | | | | 1 | 30 | | 4 | 1 | 36 | 2,957 | | 12 | | 2,969 | 3,005 |
| | | | | 0 | 1 | | 0 | 0 | 1 | 124 | | | | 124 | 125 |
| total | | | | 1 | 31 | | 4 | 1 | 37 | 3,081 | | 12 | | 3,093 | 3,130 |
| r | | | | 0 | 5 | | 0 | 0 | 5 | 771 | | 6 | | 777 | 782 |
| | | | | 1 | 26 | | 4 | 1 | 32 | 2,310 | | 6 | | 2,316 | 2,348 |
| | 0 | 22 | 2 | 8 | 18 | 0 | 11 | 152 | 213 | 557 | | 587 | 3,131 | 4,275 | 4,488 |
| | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 4 | 5 | 17 | 16 | 13 | 295 | 341 | 346 |
| total | 0 | 22 | 2 | 8 | 19 | 0 | 11 | 156 | 218 | 574 | 16 | 600 | 3,426 | 4,616 | 4,834 |
| r | 0 | 8 | 0 | 2 | 0 | 0 | 0 | 34 | 44 | 109 | 3 | 50 | 1,212 | 1,374 | 1,418 |
| | 0 | 14 | 2 | 6 | 19 | 0 | 11 | 122 | 174 | 465 | 13 | 550 | 2,214 | 3,242 | 3,416 |
| | 1 | 89 | 118 | 1,065 | 1,550 | 7 | 371 | 781 | 3,982 | 5,362 | 43 | 947 | 3,426 | 9,778 | 13,760 |
| r | 0 | 14 | 5 | 152 | 236 | 1 | 41 | 104 | 553 | 813 | 4 | 75 | 706 | 1,598 | 2,151 |
| | 1 | 61 | 69 | 521 | 728 | 4 | 197 | 435 | 2,016 | 2,631 | 22 | 553 | 1,393 | 4,599 | 6,615 |
| r | 0 | 5 | 4 | 109 | 164 | 2 | 32 | 56 | 372 | 563 | 2 | 66 | 506 | 1,137 | 1,509 |
| | 0 | 9 | 40 | 283 | 422 | 0 | 101 | 186 | 1,041 | 1,355 | 15 | 253 | 821 | 2,444 | 3,485 |

| art-time Graduate Students<br>Fall 1973 | | |
|---|---|---|
| ear | Beyond first | Total |
| 2 | 2,364 | 2,956 |

nments
dustry, and all other U.S. sources

| Postdoctorals and/or Research Associates<br>Fall 1973 | | | | |
|---|---|---|---|---|
| Source of support | | | | |
| U.S. Government | | | | |
| Fellowships/ traineeships | Research associates | Non-U.S. Government | Total | Recent doctorals[3] |
| 54 | 76 | 60 | 190 | 122 |

**Survey of Graduate Science Student Support, Fall 1973**
**Departmental Data Sheet**

## TABLE IV-23
## SUMMARY OF RESPONSES FROM 659 DOCT[ DEPARTMENTS IN THE SOCIAL SCIENC[

| Type of support | Citizenship and level | U.S. Government Source (excl. loans) | | | | | | | | | Non-Governm | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | HEW | | | | | | | | | |
| | | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | **Total** | Insti-tutional support[1] | Foreign sources | Oth U.S. sour |
| Fellowships and traineeships | U.S. | 2 | 31 | 620 | 495 | 600 | 1 | 480 | 539 | 2,768 | 2,475 | 33 | 8 |
| | Foreign | | 1 | 8 | 9 | 19 | 0 | | 319 | 356 | 383 | 480 | 3 |
| | Subtotal | 2 | 32 | 628 | 504 | 619 | 1 | 480 | 858 | 3,124 | 2,858 | 513 | 1,1 |
| | First year | 0 | 21 | 84 | 40 | 125 | 0 | 110 | 333 | 713 | 1,056 | 176 | 3 |
| | Beyond | 2 | 11 | 544 | 464 | 494 | 1 | 370 | 525 | 2,411 | 1,802 | 337 | 8 |
| Graduate research assistantships | U.S. | 1 | 16 | 3 | 50 | 116 | 8 | 243 | 390 | 827 | 1,873 | | 2 |
| | Foreign | 0 | 3 | 2 | 14 | 7 | 3 | 60 | 140 | 229 | 370 | 7 | |
| | Subtotal | 1 | 19 | 5 | 64 | 123 | 11 | 303 | 530 | 1,056 | 2,243 | 7 | 2 |
| | First year | 0 | 6 | 3 | 15 | 20 | 3 | 48 | 139 | 234 | 707 | 3 | |
| | Beyond | 1 | 13 | 2 | 49 | 103 | 8 | 255 | 391 | 822 | 1,536 | 4 | 1 |
| Graduate teaching assistantships | U.S. | | | | | 6 | | 5 | 22 | 33 | 6,139 | | |
| | Foreign | | | | | 1 | | 2 | 3 | 6 | 816 | | |
| | Subtotal | | | | | 7 | | 7 | 25 | 39 | 6,955 | | |
| | First year | | | | | 1 | | 0 | 11 | 12 | 1,557 | | |
| | Beyond | | | | | 6 | | 7 | 14 | 27 | 5,398 | | |
| Other types of support | U.S. | 0 | 48 | 3 | 6 | 4 | 0 | 16 | 239 | 316 | 700 | | 3 |
| | Foreign | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 58 | 61 | 94 | 155 | |
| | Subtotal | 0 | 48 | 3 | 6 | 4 | 0 | 19 | 297 | 377 | 794 | 155 | 3 |
| | First year | 0 | 22 | 1 | 2 | 1 | 0 | 2 | 105 | 133 | 222 | 75 | |
| | Beyond | 0 | 26 | 2 | 4 | 3 | 0 | 17 | 192 | 244 | 572 | 80 | 2 |
| **All types, total** | | 3 | 99 | 636 | 574 | 753 | 12 | 809 | 1,710 | 4,596 | 12,850 | 675 | 1,8 |
| Men | First year | 0 | 45 | 63 | 35 | 74 | 3 | 108 | 462 | 790 | 2,504 | 214 | 3 |
| | Beyond | 2 | 44 | 413 | 308 | 363 | 9 | 484 | 916 | 2,539 | 7,009 | 372 | 9 |
| Women | First year | 0 | 4 | 25 | 22 | 73 | 0 | 52 | 126 | 302 | 1,038 | 40 | 1 |
| | Beyond | 1 | 6 | 135 | 209 | 243 | 0 | 165 | 206 | 965 | 2,299 | 49 | 3 |

| Part-time Graduate Students Fall 1973 | | |
|---|---|---|
| First year | Beyond first | Total |
| 2,445 | 7,271 | 9,716 |

| Postdoctorals and/or Research Associates Fall 1973 | | | |
|---|---|---|---|
| Source of support | | | |
| U.S. Government | | | |
| Fellowships/ traineeships | Research associates | Non-U.S. Government | Total |
| 53 | 105 | 219 | 377 |

[1] Includes institution's and State and local governments.
[2] Includes support from nonprofit institutions, industry, and all other U.S. sources.
[3] Since 1969.

nce Student Support, Fall 1973
ntal Data Sheet

## TABLE IV-23
## SUMMARY OF RESPONSES FROM 659 DOCTORATE DEPARTMENTS IN THE SOCIAL SCIENCES

| p and | U.S. Government Source (excl. loans) | | | | | | | | | Non-Government Source | | | | | Grand total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | HEW | | | | | | | | | | | | |
| | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | Institutional support[1] | Foreign sources | Other U.S. sources[2] | Self, loans, and family | Total | |
| | 2 | 31 | 620 | 495 | 600 | 1 | 480 | 539 | 2,768 | 2,475 | 33 | 831 | | 3,339 | 6,107 |
| | | 1 | 8 | 9 | 19 | 0 | | 319 | 356 | 383 | 480 | 330 | | 1,193 | 1,549 |
| | 2 | 32 | 628 | 504 | 619 | 1 | 480 | 858 | 3,124 | 2,858 | 513 | 1,161 | | 4,532 | 7,656 |
| | 0 | 21 | 84 | 40 | 125 | 0 | 110 | 333 | 713 | 1,056 | 176 | 309 | | 1,541 | 2,254 |
| | 2 | 11 | 544 | 464 | 494 | 1 | 370 | 525 | 2,411 | 1,802 | 337 | 852 | | 2,991 | 5,402 |
| | 1 | 16 | 3 | 50 | 116 | 8 | 243 | 390 | 827 | 1,873 | | 219 | | 2,092 | 2,919 |
| | 0 | 3 | 2 | 14 | 7 | 3 | 60 | 140 | 229 | 370 | 7 | 55 | | 432 | 661 |
| | 1 | 19 | 5 | 64 | 123 | 11 | 303 | 530 | 1,056 | 2,243 | 7 | 274 | | 2,524 | 3,580 |
| | 0 | 6 | 3 | 15 | 20 | 3 | 48 | 139 | 234 | 707 | 3 | 86 | | 796 | 1,030 |
| | 1 | 13 | 2 | 49 | 103 | 8 | 255 | 391 | 822 | 1,536 | 4 | 188 | | 1,728 | 2,550 |
| | | | | | 6 | | 5 | 22 | 33 | 6,139 | | 44 | | 6,183 | 6,216 |
| | | | | | 1 | | 2 | 3 | 6 | 816 | | 2 | | 818 | 824 |
| | | | | | 7 | | 7 | 25 | 39 | 6,955 | | 46 | | 7,001 | 7,040 |
| | | | | | 1 | | 0 | 11 | 12 | 1,557 | | 9 | | 1,566 | 1,578 |
| | | | | | 6 | | 7 | 14 | 27 | 5,398 | | 37 | | 5,435 | 5,462 |
| | 0 | 48 | 3 | 6 | 4 | 0 | 16 | 239 | 316 | 700 | | 320 | 9,461 | 10,481 | 10,797 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 58 | 61 | 94 | 155 | 34 | 1,495 | 1,778 | 1,839 |
| | 0 | 48 | 3 | 6 | 4 | 0 | 19 | 297 | 377 | 794 | 155 | 354 | 10,956 | 12,259 | 12,636 |
| | 0 | 22 | 1 | 2 | 1 | 0 | 2 | 105 | 133 | 222 | 75 | 91 | 4,120 | 4,508 | 4,641 |
| | 0 | 26 | 2 | 4 | 3 | 0 | 17 | 192 | 244 | 572 | 80 | 263 | 6,836 | 7,751 | 7,995 |
| | 3 | 99 | 636 | 574 | 753 | 12 | 809 | 1,710 | 4,596 | 12,850 | 675 | 1,835 | 10,956 | 26,316 | 30,912 |
| | 0 | 45 | 63 | 35 | 74 | 3 | 108 | 462 | 790 | 2,504 | 214 | 354 | 2,931 | 6,003 | 6,793 |
| | 2 | 44 | 413 | 308 | 363 | 9 | 484 | 916 | 2,539 | 7,009 | 372 | 993 | 4,957 | 13,331 | 15,870 |
| | 0 | 4 | 25 | 22 | 73 | 0 | 52 | 126 | 302 | 1,038 | 40 | 141 | 1,189 | 2,408 | 2,710 |
| | 1 | 6 | 135 | 209 | 243 | 0 | 165 | 206 | 965 | 2,299 | 49 | 347 | 1,879 | 4,574 | 5,539 |

me Graduate Students
Fall 1973

| | Beyond first | Total |
|---|---|---|
| | 7,271 | 9,716 |

and all other U.S. sources

Postdoctorals and/or Research Associates
Fall 1973

| Source of support | | | | |
|---|---|---|---|---|
| U.S. Government | | | | |
| Fellowships/ traineeships | Research associates | Non-U.S. Government | Total | Recent doctorals[3] |
| 53 | 105 | 219 | 377 | 125 |

**Survey of Graduate Science Student Support, Fall 1973**
**Departmental Data Sheet**

**TABLE IV-24**
**SUMMARY OF RESPONSES FROM 14 I**
**DEPARTMENTS IN ALL OTHER SC**

| Type of support | Citizenship and level | U.S. Government Source (excl. loans) | | | | | | | | | Non- | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | HEW | | | | | | | | |
| | | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | Insti-tutional support[1] | Forei sourc |
| Fellowships and traineeships | U.S. | 0 | 0 | 1 | 0 | 25 | 0 | 0 | 1 | 27 | 1 | 0 |
| | Foreign | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 1 | 0 |
| | Subtotal | 0 | 0 | 1 | 0 | 25 | 0 | 0 | 1 | 27 | 2 | 0 |
| | First year | 0 | 0 | 0 | 0 | 25 | 0 | 0 | 1 | 26 | 1 | 0 |
| | Beyond | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 |
| Graduate research assistantships | U.S. | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 9 | |
| | Foreign | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| | Subtotal | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 10 | 0 |
| | First year | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| | Beyond | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 9 | 0 |
| Graduate teaching assistantships | U.S. | | | | 0 | 0 | | 0 | 0 | 0 | 33 | |
| | Foreign | | | | 0 | 0 | | 0 | 0 | 0 | 4 | |
| | Subtotal | | | | 0 | 0 | | 0 | 0 | 0 | 37 | |
| | First year | | | | 0 | 0 | | 0 | 0 | 0 | 18 | |
| | Beyond | | | | 0 | 0 | | 0 | 0 | 0 | 19 | |
| Other types of support | U.S. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | Foreign | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Subtotal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | First year | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Beyond | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **All types, total** | | 0 | 0 | 1 | 2 | 25 | 0 | 0 | 1 | 29 | 49 | 0 |
| Men | First year | 0 | 0 | 0 | 0 | 13 | 0 | 0 | 1 | 14 | 15 | 0 |
| | Beyond | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 19 | 0 |
| Women | First year | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 12 | 5 | 0 |
| | Beyond | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 10 | 0 |

| Part-time Graduate Students Fall 1973 | | |
|---|---|---|
| First year | Beyond first | Total |
| 85 | 136 | 221 |

| Postdoctorals and/or Research Ass Fall 1973 | | | |
|---|---|---|---|
| Source of support | | | |
| U.S. Government | | Non-U.S. Government | |
| Fellowships/ traineeships | Research associates | | |
| 0 | 0 | 1 | |

[1] Includes institution's and State and local governments.
[2] Includes support from nonprofit institutions, industry, and all other U.S. sources.
[3] Since 1969.

Science Student Support, Fall 1973
rtmental Data Sheet

## TABLE IV-24
## SUMMARY OF RESPONSES FROM 14 DOCTORATE DEPARTMENTS IN ALL OTHER SCIENCES

| zenship and level | U.S. Government Source (excl. loans) | | | | | | | | | Non-Government Source | | | | | Grand total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | HEW | | | | | | | Insti-tutional support[1] | Foreign sources | Other U.S. sources[2] | Self, loans, and family | Total | |
| | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | | | | | | |
| | 0 | 0 | 1 | 0 | 25 | 0 | 0 | 1 | 27 | 1 | 0 | 0 | | 1 | 28 |
| n | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 1 | 0 | 0 | | 1 | 1 |
| btotal | 0 | 0 | 1 | 0 | 25 | 0 | 0 | 1 | 27 | 2 | 0 | 0 | | 2 | 29 |
| ear | 0 | 0 | 0 | 0 | 25 | 0 | 0 | 1 | 26 | 1 | 0 | 0 | | 1 | 27 |
| d | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | | 1 | 2 |
| | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 9 | | 0 | | 9 | 11 |
| n | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | | 1 | 1 |
| btotal | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 10 | 0 | 0 | | 10 | 12 |
| ear | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | | 1 | 1 |
| d | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 9 | 0 | 0 | | 9 | 11 |
| | | | | 0 | 0 | | 0 | 0 | 0 | 33 | | 0 | | 33 | 33 |
| n | | | | 0 | 0 | | 0 | 0 | 0 | 4 | | 0 | | 4 | 4 |
| btotal | | | | 0 | 0 | | 0 | 0 | 0 | 37 | | 0 | | 37 | 37 |
| ear | | | | 0 | 0 | | 0 | 0 | 0 | 18 | | 0 | | 18 | 18 |
| d | | | | 0 | 0 | | 0 | 0 | 0 | 19 | | 0 | | 19 | 19 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 1 | 33 | 34 | 34 |
| n | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 |
| btotal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 38 | 39 | 39 |
| ear | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 13 | 14 | 14 |
| d | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 25 | 25 |
| | 0 | 0 | 1 | 2 | 25 | 0 | 0 | 1 | 29 | 49 | 0 | 1 | 38 | 88 | 117 |
| ear | 0 | 0 | 0 | 0 | 13 | 0 | 0 | 1 | 14 | 15 | 0 | 1 | 7 | 23 | 37 |
| d | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 19 | 0 | 0 | 20 | 39 | 41 |
| ear | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 12 | 5 | 0 | 0 | 6 | 11 | 23 |
| d | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 10 | 0 | 0 | 5 | 15 | 16 |

| Part-time Graduate Students Fall 1973 | | |
|---|---|---|
| t year | Beyond first | Total |
| 5 | 136 | 221 |

vernments
, industry, and all other U.S. sources

| Postdoctorals and/or Research Associates Fall 1973 | | | | |
|---|---|---|---|---|
| Source of support | | | | |
| U.S. Government | | Non-U.S. Government | Total | Recent doctorals[3] |
| Fellowships/ traineeships | Research associates | | | |
| 0 | 0 | 1 | 1 | 1 |

**Survey of Graduate Science Student Support, Fall 1973**
**Departmental Data Sheet**

**TABLE IV-25**
**SUMMARY OF RESPONSES FROM 2,452 DOCT**
**DEPARTMENTS IN MEDICAL SCHOOL**

| Type of support | Citizenship and level | U.S. Government Source (excl. loans) | | | | | | | | | Non-Governm | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | HEW | | | | | | | | | |
| | | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | Insti-tutional support[1] | Foreign sources | Oth U.S. sour |
| Fellowships and traineeships | U.S. | 16 | 26 | 55 | 3,008 | 563 | 5 | 85 | 223 | 3,981 | 1,083 | 11 | 27 |
| | Foreign | | 0 | 0 | 93 | 11 | 1 | | 42 | 147 | 165 | 101 | 5 |
| | Subtotal | 16 | 26 | 55 | 3,101 | 574 | 6 | 85 | 265 | 4,128 | 1,248 | 112 | 32 |
| | First year | 0 | 12 | 4 | 377 | 138 | 2 | 13 | 94 | 640 | 549 | 52 | 10 |
| | Beyond | 16 | 14 | 51 | 2,724 | 436 | 4 | 72 | 171 | 3,488 | 699 | 60 | 22 |
| Graduate research assistantships | U.S. | 13 | 11 | 2 | 568 | 47 | 8 | 38 | 54 | 741 | 295 | | 11 |
| | Foreign | 4 | 2 | 0 | 139 | 7 | 0 | 12 | 9 | 173 | 48 | 5 | 2 |
| | Subtotal | 17 | 13 | 2 | 707 | 54 | 8 | 50 | 63 | 914 | 343 | 5 | 14 |
| | First year | 4 | 3 | 0 | 168 | 19 | 1 | 11 | 11 | 217 | 120 | 1 | 3 |
| | Beyond | 13 | 10 | 2 | 539 | 35 | 7 | 39 | 52 | 697 | 223 | 4 | 10 |
| Graduate teaching assistantships | U.S. | | | | 19 | 13 | | 8 | 14 | 54 | 1,004 | | |
| | Foreign | | | | 1 | 3 | | 0 | 4 | 8 | 186 | | |
| | Subtotal | | | | 20 | 16 | | 8 | 18 | 62 | 1,190 | | |
| | First year | | | | 8 | 10 | | 3 | 8 | 29 | 365 | | |
| | Beyond | | | | 12 | 6 | | 5 | 10 | 33 | 825 | | |
| Other types of support | U.S. | 0 | 6 | 0 | 41 | 5 | 1 | 3 | 44 | 100 | 189 | | 8 |
| | Foreign | 0 | 0 | 0 | 9 | 1 | 0 | 5 | 1 | 16 | 32 | 36 | 3 |
| | Subtotal | 0 | 6 | 0 | 50 | 6 | 1 | 8 | 45 | 116 | 221 | 36 | 11 |
| | First year | 0 | 2 | 0 | 22 | 2 | 0 | 5 | 14 | 45 | 112 | 10 | 3 |
| | Beyond | 0 | 4 | 0 | 28 | 4 | 1 | 3 | 31 | 71 | 109 | 26 | 7 |
| **All types, total** | | 33 | 45 | 57 | 3,878 | 650 | 15 | 151 | 391 | 5,220 | 3,002 | 153 | 59 |
| Men | First year | 4 | 15 | 2 | 418 | 95 | 3 | 26 | 103 | 666 | 806 | 52 | 12 |
| | Beyond | 19 | 27 | 41 | 2,430 | 283 | 10 | 86 | 229 | 3,125 | 1,414 | 77 | 29 |
| Women | First year | 0 | 2 | 2 | 157 | 74 | 0 | 6 | 24 | 265 | 340 | 11 | 6 |
| | Beyond | 10 | 1 | 12 | 873 | 198 | 2 | 33 | 35 | 1,164 | 442 | 13 | 11 |

| Part-time Graduate Students Fall 1973 | | |
|---|---|---|
| First year | Beyond first | Total |
| 491 | 856 | 1,347 |

| Postdoctorals and/or Research Associates Fall 1973 | | | |
|---|---|---|---|
| Source of support | | | |
| U.S. Government | | Non-U.S. Government | Total |
| Fellowships/ traineeships | Research associates | | |
| 3,415 | 1,775 | 2,677 | 7,867 |

[1] Includes institution's and State and local governments.
[2] Includes support from nonprofit institutions, industry, and all other U.S. sources.
[3] Since 1969.

ce Student Support, Fall 1973
tal Data Sheet

## TABLE IV-25
## SUMMARY OF RESPONSES FROM 2,452 DOCTORATE DEPARTMENTS IN MEDICAL SCHOOLS

| and | U.S. Government Source (excl. loans) | | | | | | | | | Non-Government Source | | | | | Grand total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | HEW | | | | | | | | | | | | |
| | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | Institutional support[1] | Foreign sources | Other U.S. sources[2] | Self, loans, and family | Total | |
| ..... | 16 | 26 | 55 | 3,008 | 563 | 5 | 85 | 223 | 3,981 | 1,083 | 11 | 270 | | 1,364 | 5,345 |
| ..... | | 0 | 0 | 93 | 11 | 1 | | 42 | 147 | 165 | 101 | 57 | | 323 | 470 |
| ..... | 16 | 26 | 55 | 3,101 | 574 | 6 | 85 | 265 | 4,128 | 1,248 | 112 | 327 | | 1,687 | 5,815 |
| ..... | 0 | 12 | 4 | 377 | 138 | 2 | 13 | 94 | 640 | 549 | 52 | 107 | | 708 | 1,348 |
| ..... | 16 | 14 | 51 | 2,724 | 436 | 4 | 72 | 171 | 3,488 | 699 | 60 | 220 | | 979 | 4,467 |
| ..... | 13 | 11 | 2 | 568 | 47 | 8 | 38 | 54 | 741 | 295 | | 115 | | 410 | 1,151 |
| ..... | 4 | 2 | 0 | 139 | 7 | 0 | 12 | 9 | 173 | 48 | 5 | 25 | | 78 | 251 |
| ..... | 17 | 13 | 2 | 707 | 54 | 8 | 50 | 63 | 914 | 343 | 5 | 140 | | 488 | 1,402 |
| ..... | 4 | 3 | 0 | 168 | 19 | 1 | 11 | 11 | 217 | 120 | 1 | 36 | | 157 | 374 |
| ..... | 13 | 10 | 2 | 539 | 35 | 7 | 39 | 52 | 697 | 223 | 4 | 104 | | 331 | 1,028 |
| ..... | | | | 19 | 13 | | 8 | 14 | 54 | 1,004 | | 6 | | 1,010 | 1,064 |
| ..... | | | | 1 | 3 | | 0 | 4 | 8 | 186 | | 8 | | 194 | 202 |
| ..... | | | | 20 | 16 | | 8 | 18 | 62 | 1,190 | | 14 | | 1,204 | 1,266 |
| ..... | | | | 8 | 10 | | 3 | 8 | 29 | 365 | | 6 | | 371 | 400 |
| ..... | | | | 12 | 6 | | 5 | 10 | 33 | 825 | | 8 | | 833 | 866 |
| ..... | 0 | 6 | 0 | 41 | 5 | •1 | 3 | 44 | 100 | 189 | | 85 | 2,117 | 2,391 | 2,491 |
| ..... | 0 | 0 | 0 | 9 | 1 | 0 | 5 | 1 | 16 | 32 | 36 | 31 | 200 | 299 | 315 |
| ..... | 0 | 6 | 0 | 50 | 6 | 1 | 8 | 45 | 116 | 221 | 36 | 116 | 2,317 | 2,690 | 2,806 |
| ..... | 0 | 2 | 0 | 22 | 2 | 0 | 5 | 14 | 45 | 112 | 10 | 37 | 1,342 | 1,501 | 1,546 |
| ..... | 0 | 4 | 0 | 28 | 4 | 1 | 3 | 31 | 71 | 109 | 26 | 79 | 975 | 1,189 | 1,260 |
| ..... | 33 | 45 | 57 | 3,878 | 650 | 15 | 151 | 391 | 5,220 | 3,002 | 153 | 597 | 2,317 | 6,069 | 11,289 |
| ..... | 4 | 15 | 2 | 418 | 95 | 3 | 26 | 103 | 666 | 806 | 52 | 124 | 834 | 1,816 | 2,482 |
| ..... | 19 | 27 | 41 | 2,430 | 283 | 10 | 86 | 229 | 3,125 | 1,414 | 77 | 299 | 662 | 2,452 | 5,577 |
| ..... | 0 | 2 | 2 | 157 | 74 | 0 | 6 | 24 | 265 | 340 | 11 | 62 | 508 | 921 | 1,186 |
| ..... | 10 | 1 | 12 | 873 | 198 | 2 | 33 | 35 | 1,164 | 442 | 13 | 112 | 313 | 880 | 2,044 |

| ne Graduate Students Fall 1973 | |
|---|---|
| Beyond first | Total |
| 856 | 1,347 |

and all other U.S. sources

| Postdoctorals and/or Research Associates Fall 1973 | | | | |
|---|---|---|---|---|
| Source of support | | | | |
| U.S. Government | | | | |
| Fellowships/ traineeships | Research associates | Non-U.S. Government | Total | Recent doctorals[3] |
| 3,415 | 1,775 | 2,677 | 7,867 | 4,098 |

**Survey of Graduate Science Student Support, Fall 1973**
**Departmental Data Sheet**

**TABLE IV-26**
**SUMMARY OF RESPONSES FROM 4,**
**DEPARTMENTS IN PUBLIC SC**

| Type of support | Citizenship and level | U.S. Government Source (excl. loans) | | | | | | | | | Non |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | HEW | | | | | | | |
| | | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | Institutional support[1] |
| Fellowships and traineeships | U.S. | 132 | 195 | 1,061 | 4,220 | 1,852 | 37 | 1,248 | 1,845 | 10,590 | 4,091 |
| | Foreign | | 3 | 7 | 103 | 44 | 6 | | 536 | 699 | 354 |
| | Subtotal | 132 | 198 | 1,068 | 4,323 | 1,896 | 43 | 1,248 | 2,381 | 11,289 | 4,445 |
| | First year | 46 | 96 | 93 | 567 | 626 | 9 | 307 | 1,010 | 2,754 | 1,743 |
| | Beyond | 86 | 102 | 975 | 3,756 | 1,270 | 34 | 941 | 1,371 | 8,535 | 2,902 |
| Graduate research assistantships | U.S. | 749 | 971 | 25 | 1,634 | 549 | 542 | 3,266 | 3,187 | 10,923 | 8,457 |
| | Foreign | 197 | 373 | 3 | 500 | 72 | 148 | 1,104 | 1,029 | 3,426 | 2,173 |
| | Subtotal | 946 | 1,344 | 28 | 2,134 | 621 | 690 | 4,370 | 4,216 | 14,349 | 10,630 |
| | First year | 110 | 286 | 7 | 398 | 156 | 175 | 822 | 1,085 | 3,039 | 3,383 |
| | Beyond | 836 | 1,058 | 21 | 1,736 | 465 | 515 | 3,548 | 3,131 | 11,310 | 7,247 |
| Graduate teaching assistantships | U.S. | | | | 35 | 59 | | 52 | 77 | 223 | 29,475 |
| | Foreign | | | | 9 | 10 | | 10 | 20 | 49 | 5,181 |
| | Subtotal | | | | 44 | 69 | | 62 | 97 | 272 | 34,656 |
| | First year | | | | 11 | 26 | | 25 | 39 | 101 | 11,495 |
| | Beyond | | | | 33 | 43 | | 37 | 58 | 171 | 23,161 |
| Other types of support | U.S. | 39 | 1,637 | 6 | 65 | 40 | 25 | 47 | 1,228 | 3,087 | 2,359 |
| | Foreign | 4 | 173 | 0 | 9 | 2 | 7 | 20 | 167 | 382 | 455 |
| | Subtotal | 43 | 1,810 | 6 | 74 | 42 | 32 | 67 | 1,395 | 3,469 | 2,814 |
| | First year | 16 | 752 | 1 | 23 | 6 | 10 | 23 | 534 | 1,365 | 938 |
| | Beyond | 27 | 1,058 | 5 | 51 | 36 | 22 | 44 | 861 | 2,104 | 1,876 |
| **All types, total** | | 1,121 | 3,352 | 1,102 | 6,575 | 2,628 | 765 | 5,747 | 8,089 | 29,379 | 52,745 |
| Men | First year | 162 | 1,111 | 75 | 697 | 505 | 180 | 997 | 2,338 | 6,065 | 13,773 |
| | Beyond | 882 | 2,161 | 805 | 4,177 | 1,163 | 547 | 4,075 | 4,805 | 18,615 | 28,517 |
| Women | First year | 10 | 23 | 26 | 302 | 309 | 14 | 180 | 330 | 1,194 | 3,786 |
| | Beyond | 67 | 57 | 196 | 1,399 | 651 | 24 | 495 | 616 | 3,505 | 6,669 |

| Part-time Graduate Students Fall 1973 | | |
|---|---|---|
| First year | Beyond first | Total |
| 12,121 | 19,632 | 31,753 |

| Postdoctorals and/or Research As Fall 1973 | | |
|---|---|---|
| Source of support | | |
| U.S. Government | | Non-U.S. Government |
| Fellowships/ traineeships | Research associates | |
| 2,171 | 3,886 | 2,967 |

[1] Includes institution's and State and local governments.
[2] Includes support from nonprofit institutions, industry, and all other U.S. sources.
[3] Since 1969.

e Student Support, Fall 1973
al Data Sheet

## TABLE IV-26
## SUMMARY OF RESPONSES FROM 4,496 GRADUATE DEPARTMENTS IN PUBLIC SCHOOLS

| and | U.S. Government Source (excl. loans) | | | | | | | | | Non-Government Source | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | HEW | | | | | | | | | | | | |
| | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | **Total** | Institutional support[1] | Foreign sources | Other U.S. sources[2] | Self, loans, and family | Total | **Grand total** |
| ..... | 132 | 195 | 1,061 | 4,220 | 1,852 | 37 | 1,248 | 1,845 | 10,590 | 4,091 | 71 | 1,713 | | 5,875 | 16,465 |
| ..... | | 3 | 7 | 103 | 44 | 6 | | 536 | 699 | 554 | 1,252 | 488 | | 2,294 | 2,993 |
| ..... | 132 | 198 | 1,068 | 4,323 | 1,896 | 43 | 1,248 | 2,381 | 11,289 | 4,645 | 1,323 | 2,201 | | 8,169 | 19,458 |
| ..... | 46 | 96 | 93 | 567 | 626 | 9 | 307 | 1,010 | 2,754 | 1,743 | 543 | 699 | | 2,985 | 5,739 |
| ..... | 86 | 102 | 975 | 3,756 | 1,270 | 34 | 941 | 1,371 | 8,535 | 2,902 | 780 | 1,502 | | 5,184 | 13,719 |
| ..... | 749 | 971 | 25 | 1,634 | 549 | 542 | 3,266 | 3,187 | 10,923 | 8,457 | | 1,992 | | 10,449 | 21,372 |
| ..... | 197 | 373 | 3 | 500 | 72 | 148 | 1,104 | 1,029 | 3,426 | 2,173 | 136 | 526 | | 2,835 | 6,261 |
| ..... | 946 | 1,344 | 28 | 2,134 | 621 | 690 | 4,370 | 4,216 | 14,349 | 10,630 | 136 | 2,518 | | 13,284 | 27,633 |
| ..... | 110 | 286 | 7 | 398 | 156 | 175 | 822 | 1,085 | 3,039 | 3,383 | 50 | 846 | | 4,279 | 7,318 |
| ..... | 836 | 1,058 | 21 | 1,736 | 465 | 515 | 3,548 | 3,131 | 11,310 | 7,247 | 86 | 1,672 | | 9,005 | 20,315 |
| ..... | | | | 35 | 59 | | 52 | 77 | 223 | 29,475 | | 177 | | 29,652 | 29,875 |
| ..... | | | | 9 | 10 | | 10 | 20 | 49 | 5,181 | | 38 | | 5,219 | 5,268 |
| ..... | | | | 44 | 69 | | 62 | 97 | 272 | 34,656 | | 215 | | 34,871 | 35,143 |
| ..... | | | | 11 | 26 | | 25 | 39 | 101 | 11,495 | | 81 | | 11,576 | 11,677 |
| ..... | | | | 33 | 43 | | 37 | 58 | 171 | 23,161 | | 134 | | 23,295 | 23,466 |
| ..... | 39 | 1,637 | 6 | 65 | 40 | 25 | 47 | 1,228 | 3,087 | 2,359 | | 1,640 | 24,025 | 28,024 | 31,111 |
| ..... | 4 | 173 | 0 | 9 | 2 | 7 | 20 | 167 | 382 | 455 | 881 | 222 | 4,736 | 6,294 | 6,676 |
| ..... | 43 | 1,810 | 6 | 74 | 42 | 32 | 67 | 1,395 | 3,469 | 2,814 | 881 | 1,862 | 28,761 | 34,318 | 37,787 |
| ..... | 6 | 752 | 1 | 23 | 6 | 10 | 23 | 534 | 1,365 | 938 | 411 | 608 | 13,072 | 15,029 | 16,394 |
| ..... | 27 | 1,058 | 5 | 51 | 36 | 22 | 44 | 861 | 2,104 | 1,876 | 470 | 1,254 | 15,689 | 19,289 | 21,393 |
| ..... | 1,121 | 3,352 | 1,102 | 6,575 | 2,628 | 765 | 5,747 | 8,089 | 29,379 | 52,745 | 2,340 | 6,796 | 28,761 | 90,642 | 120,021 |
| ..... | 162 | 1,111 | 75 | 697 | 505 | 180 | 997 | 2,338 | 6,065 | 13,773 | 893 | 1,876 | 10,063 | 26,605 | 32,670 |
| ..... | 882 | 2,161 | 805 | 4,177 | 1,163 | 547 | 4,075 | 4,805 | 18,615 | 28,517 | 1,213 | 3,875 | 12,334 | 45,939 | 64,554 |
| ..... | 10 | 23 | 26 | 302 | 309 | 14 | 180 | 330 | 1,194 | 3,786 | 117 | 358 | 3,009 | 7,264 | 8,458 |
| ..... | 67 | 57 | 196 | 1,399 | 651 | 24 | 495 | 616 | 3,505 | 6,669 | 123 | 687 | 3,355 | 10,834 | 14,339 |

| e Graduate Students Fall 1973 | |
|---|---|
| Beyond first | Total |
| 19,632 | 31,753 |

| Postdoctorals and/or Research Associates Fall 1973 | | | | |
|---|---|---|---|---|
| Source of support | | | | |
| U.S. Government | | | | |
| Fellowships/ traineeships | Research associates | Non-U.S. Government | Total | Recent doctorals[3] |
| 2,171 | 3,886 | 2,967 | 9,024 | 5,421 |

nd all other U.S. sources

**Survey of Graduate Science Student Support, Fall 1973**
**Departmental Data Sheet**

**TABLE IV-27**
**SUMMARY OF RESPONSES FROM 2,063 GRAD**
**DEPARTMENTS IN PRIVATE SCHOOLS**

| Type of support | Citizenship and level | U.S. Government Source (excl. loans) | | | | | | | | | Non-Governm | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | HEW | | | | | | | | | |
| | | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | Institutional support[1] | Foreign sources | Oth U.S sour |
| Fellowships and traineeships | U.S. | 52 | 132 | 582 | 2,686 | 1,133 | 12 | 1,290 | 617 | 6,504 | 4,325 | 35 | 1,3 |
| | Foreign | | 2 | 2 | 79 | 17 | 3 | | 206 | 309 | 974 | 802 | 3 |
| | Subtotal | 52 | 134 | 584 | 2,765 | 1,150 | 15 | 1,290 | 823 | 6,813 | 5,299 | 837 | 1,7 |
| | First year | 12 | 89 | 59 | 288 | 236 | 9 | 333 | 397 | 1,423 | 2,284 | 311 | 5 |
| | Beyond | 40 | 45 | 525 | 2,477 | 914 | 6 | 957 | 426 | 5,390 | 3,015 | 526 | 1,1 |
| Graduate research assistantships | U.S. | 266 | 660 | 8 | 654 | 109 | 301 | 1,733 | 582 | 4,313 | 1,120 | | 4 |
| | Foreign | 118 | 398 | 1 | 173 | 30 | 159 | 818 | 305 | 2,002 | 348 | 21 | 1 |
| | Subtotal | 384 | 1,058 | 9 | 827 | 139 | 460 | 2,551 | 887 | 6,315 | 1,468 | 21 | 6 |
| | First year | 43 | 279 | 0 | 124 | 23 | 110 | 367 | 183 | 1,129 | 454 | 6 | 1 |
| | Beyond | 341 | 779 | 9 | 703 | 116 | 350 | 2,184 | 704 | 5,186 | 1,014 | 15 | 4 |
| Graduate teaching assistantships | U.S. | | | | 5 | 7 | | 16 | 11 | 39 | 6,403 | | |
| | Foreign | | | | 1 | 0 | | 9 | 2 | 12 | 1,730 | | |
| | Subtotal | | | | 6 | 7 | | 25 | 13 | 51 | 8,133 | | |
| | First year | | | | 3 | 0 | | 4 | 10 | 17 | 2,722 | | |
| | Beyond | | | | 3 | 7 | | 21 | 3 | 34 | 5,411 | | |
| Other types of support | U.S. | 5 | 161 | 3 | 21 | 5 | 2 | 63 | 322 | 582 | 693 | | 7 |
| | Foreign | 0 | 17 | 0 | 3 | 1 | 2 | 6 | 27 | 56 | 110 | 462 | 1 |
| | Subtotal | 5 | 178 | 3 | 24 | 6 | 4 | 69 | 349 | 638 | 803 | 462 | 8 |
| | First year | 5 | 71 | 0 | 12 | 1 | 0 | 25 | 150 | 264 | 350 | 240 | 2 |
| | Beyond | 0 | 107 | 3 | 12 | 5 | 4 | 44 | 199 | 374 | 453 | 222 | 5 |
| **All types, total** | | 441 | 1,370 | 596 | 3,622 | 1,302 | 479 | 3,935 | 2,072 | 13,817 | 15,703 | 1,320 | 3,3 |
| Men | First year | 54 | 420 | 41 | 294 | 159 | 115 | 634 | 653 | 2,370 | 4,573 | 508 | 8 |
| | Beyond | 361 | 888 | 428 | 2,313 | 609 | 353 | 2,847 | 1,168 | 8,967 | 7,905 | 700 | 1,8 |
| Women | First year | 6 | 19 | 18 | 133 | 101 | 4 | 95 | 87 | 463 | 1,237 | 49 | 1 |
| | Beyond | 20 | 43 | 109 | 882 | 433 | 7 | 359 | 164 | 2,017 | 1,988 | 63 | 4 |

| Part-time Graduate Students Fall 1973 | | |
|---|---|---|
| First year | Beyond first | Total |
| 8,257 | 13,634 | 21,891 |

| Postdoctorals and/or Research Associates Fall 1973 | | | |
|---|---|---|---|
| Source of support | | | |
| U.S. Government | | | |
| Fellowships/ traineeships | Research associates | Non-U.S. Government | Total |
| 2,424 | 2,805 | 2,105 | 7,334 |

[1] Includes institution's and State and local governments.
[2] Includes support from nonprofit institutions, industry, and all other U.S. sources.
[3] Since 1969

e Student Support, Fall 1973
al Data Sheet

## TABLE IV-27
## SUMMARY OF RESPONSES FROM 2,063 GRADUATE DEPARTMENTS IN PRIVATE SCHOOLS

| nd | U.S. Government Source (excl. loans) | | | | | | | | | Non-Government Source | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | HEW | | | | | | | | | | | | |
| | AEC | DOD | NDEA | NIH | Other | NASA | NSF | Other | Total | Institutional support[1] | Foreign sources | Other U.S. sources[2] | Self, loans, and family | Total | Grand total |
| ..... | 52 | 132 | 582 | 2,686 | 1,133 | 12 | 1,290 | 617 | 6,504 | 4,325 | 35 | 1,345 | | 5,705 | 12,209 |
| ..... | | 2 | 2 | 79 | 17 | 3 | | 206 | 309 | 974 | 802 | 383 | | 2,159 | 2,468 |
| ..... | 52 | 134 | 584 | 2,765 | 1,150 | 15 | 1,290 | 823 | 6,813 | 5,299 | 837 | 1,728 | | 7,864 | 14,677 |
| ..... | 12 | 89 | 59 | 288 | 236 | 9 | 333 | 397 | 1,423 | 2,284 | 311 | 530 | | 3,125 | 4,548 |
| ..... | 40 | 45 | 525 | 2,477 | 914 | 6 | 957 | 426 | 5,390 | 3,015 | 526 | 1,198 | | 4,739 | 10,129 |
| ..... | 266 | 660 | 8 | 654 | 109 | 301 | 1,733 | 582 | 4,313 | 1,120 | | 479 | | 1,599 | 5,912 |
| ..... | 118 | 398 | 1 | 173 | 30 | 159 | 818 | 305 | 2,002 | 348 | 21 | 195 | | 564 | 2,566 |
| ..... | 384 | 1,058 | 9 | 827 | 139 | 460 | 2,551 | 887 | 6,315 | 1,468 | 21 | 674 | | 2,163 | 8,478 |
| ..... | 43 | 279 | 0 | 124 | 23 | 110 | 367 | 183 | 1,129 | 454 | 6 | 196 | | 656 | 1,785 |
| ..... | 341 | 779 | 9 | 703 | 116 | 350 | 2,184 | 704 | 5,186 | 1,014 | 15 | 478 | | 1,507 | 6,693 |
| ..... | | | | 5 | 7 | | 16 | 11 | 39 | 6,403 | | 56 | | 6,459 | 6,498 |
| ..... | | | | 1 | 0 | | 9 | 2 | 12 | 1,730 | | 12 | | 1,742 | 1,754 |
| ..... | | | | 6 | 7 | | 25 | 13 | 51 | 8,133 | | 68 | | 8,201 | 8,252 |
| ..... | | | | 3 | 0 | | 4 | 10 | 17 | 2,722 | | 24 | | 2,746 | 2,763 |
| ..... | | | | 3 | 7 | | 21 | 3 | 34 | 5,411 | | 44 | | 5,455 | 5,489 |
| ..... | 5 | 161 | 3 | 21 | 5 | 2 | 63 | 322 | 582 | 693 | | 748 | 8,082 | 9,523 | 10,105 |
| ..... | 0 | 17 | 0 | 3 | 1 | 2 | 6 | 27 | 56 | 110 | 462 | 105 | 2,052 | 2,729 | 2,785 |
| ..... | 5 | 178 | 3 | 24 | 6 | 4 | 69 | 349 | 638 | 803 | 462 | 853 | 10,134 | 12,252 | 12,890 |
| ..... | 5 | 71 | 0 | 12 | 1 | 0 | 25 | 150 | 264 | 350 | 240 | 285 | 4,483 | 5,358 | 5,622 |
| ..... | 0 | 107 | 3 | 12 | 5 | 4 | 44 | 199 | 374 | 453 | 222 | 568 | 5,651 | 6,894 | 7,268 |
| ..... | 441 | 1,370 | 596 | 3,622 | 1,302 | 479 | 3,935 | 2,072 | 13,817 | 15,703 | 1,320 | 3,323 | 10,134 | 30,480 | 44,297 |
| ..... | 54 | 420 | 41 | 294 | 159 | 115 | 634 | 653 | 2,370 | 4,573 | 508 | 860 | 3,331 | 9,272 | 11,642 |
| ..... | 361 | 888 | 428 | 2,313 | 609 | 353 | 2,847 | 1,168 | 8,967 | 7,905 | 700 | 1,869 | 4,289 | 14,763 | 23,730 |
| ..... | 6 | 19 | 18 | 133 | 101 | 4 | 95 | 87 | 463 | 1,237 | 49 | 175 | 1,152 | 2,613 | 3,076 |
| ..... | 20 | 43 | 109 | 882 | 433 | 7 | 359 | 164 | 2,017 | 1,988 | 63 | 419 | 1,362 | 3,832 | 5,849 |

| Graduate Students Fall 1973 | |
|---|---|
| Beyond first | Total |
| 13,634 | 21,891 |

d all other U.S. sources

| Postdoctorals and/or Research Associates Fall 1973 | | | | |
|---|---|---|---|---|
| Source of support | | | | |
| U.S. Government | | | | |
| Fellowships/ traineeships | Research associates | Non-U.S. Government | Total | Recent doctorals[3] |
| 2,424 | 2,805 | 2,105 | 7,334 | 4,191 |

# INSTRUCTIONS FOR COMPLETING THE DEPARTMENTAL DATA SHEET

GENERAL:

This form is being mailed to all institutions of higher education in the U. S. that confer doctoral-level degrees in at least one of the following fields of science:

Engineering
- Aeronautical
- Agricultural
- Chemical
- Civil
- Electrical
- Engineering science
- Industrial
- Mechanical
- Metallurgical and materials
- Mining
- Nuclear
- Petroleum
- Other engineering

Physical sciences
- Astronomy
- Atmospheric sciences
- Chemistry
- Geosciences
- Oceanography
- Physics

Mathematical sciences
- Applied mathematics
- Mathematics
- Statistics

Life sciences
- Agriculture
- Anatomy
- Biochemistry
- Biology
- Botany
- Clinical medical sciences
- Ecology
- Genetics
- Microbiology
- Pharmacology
- Physiology
- Zoology
- Other life sciences

Psychology
- Clinical psychology
- Experimental psychology
- Human development
- Physiological psychology
- Social psychology
- Other psychology

Social sciences
- Agricultural economics
- Anthropology
- Economics (except agricultural)
- Geography
- History and philosophy of science
- Linguistics
- Political science
- Sociology

**Item 4–**
*Highest degree offered.*
Check the box which refers to the highest degree offered by this science department in October 1972.

**Item 5–**
A *full-time* graduate student is defined here as a *bona fide* graduate student enrolled for an advanced degree (not a regular staff member, e.g., an instructor) who is engaged in training activities in his field of science; these activities may embrace any appropriate combination of study, teaching, and research. (Some institutions use the phrase "geographical full-time student" to describe such students). All other graduate students enrolled for advanced degrees are considered *part time* and should be reported under Item 7.

A *first-year* graduate student is defined for this program as one who will have completed *less than one normal year* of graduate study as of the beginning of the Fall term of 1972. All other students should be considered beyond first level.

Insert in each appropriate box the number of students who are simultaneously (a) full-time graduate students (defined above), (b) enrolled in an advanced degree program, and (c) receiving a total stipend of *$1200* or more–*not counting tuition and excluding personal, family, and loan sources*–during the 1972-1973 academic year.

All students meeting criteria (a) and (b), but not (c), should be counted under "Self, Loans, and Family." Full-time graduate students working for an advanced degree who are employees of another organization, on leave of absence, and whose major support is provided by their employer, should be listed under "Other U. S. Sources." If a graduate student receives stipend support

Institutional Grant should appear under NSF, not under "Institutional Support"). Institutional Support refers to support from "This" institution, as well as from State and local governments.

Students are to be classified according to citizenship, i.e., *U. S.* citizens (or nationals, e.g., native residents of a possession of the U. S. such as American Samoa), and *foreign* students. Applicants for U. S. citizenship are to be considered as "foreign" until the date their citizenship becomes effective.

Each row total given under *ALL SOURCES* is to be split into two components, *First Year* and *Beyond First*. Thus *every* full-time graduate student enrolled for an advanced degree is counted only once by a major source of support and once again in a separate breakout by level (First Year or Beyond First) of study.

**Item 6–**
Insert in the appropriate boxes the number of full-time students who were enrolled in this department in Fall 1971. If the exact data are not at hand, please give a reasonable estimate.

**Item 7–**
The numbers of graduate students who are working for advanced degrees, but who are not pursuing graduate work full time, are enumerated under the entries for *part time*. Do not include "special" students who are *not* enrolled for advanced degrees or students who have left your institution but are completing their theses while engaged in other activities.

**Item 8–**
Under *Postdoctorals* and/or *Research Associates*, include individuals with doctorates (including foreign degrees that are equivalent to U. S. doctorates) who devote *full time* to research activities or study in the department under temporary appointments carry-

Industrial
Mechanical
Metallurgical and materials
Mining
Nuclear
Petroleum
Other engineering

Mathematical sciences
Applied mathematics
Mathematics
Statistics

Ecology
Genetics
Microbiology
Pharmacology
Physiology
Zoology
Other life sciences

Psychology
Clinical psychology
Experimental psychology

Agricultural economics
Anthropology
Economics (except agricultural)
Geography
History and philosophy of science
Linguistics
Political science
Sociology

**Item 4–**
*Highest degree offered.*
Check the box which refers to the highest degree offered by this science department in October 1972.

**Item 5–**
A *full-time* graduate student is defined here as a *bona fide* graduate student enrolled for an advanced degree (not a regular staff member, e.g., an instructor) who is engaged in training activities in his field of science; these activities may embrace any appropriate combination of study, teaching, and research. (Some institutions use the phrase "geographical full-time student" to describe such students). All other graduate students enrolled for advanced degrees are considered *part time* and should be reported under Item 7.

A *first-year* graduate student is defined for this program as one who will have completed *less than one normal year* of graduate study as of the beginning of the Fall term of 1972. All other students should be considered beyond first level.

Insert in each appropriate box the number of students who are simultaneously (a) full-time graduate students (defined above), (b) enrolled in an advanced degree program, and (c) receiving a total stipend of *$1200* or more–*not counting tuition and excluding personal, family, and loan sources*–during the 1972-1973 academic year.

All students meeting criteria (a) and (b), but not (c), should be counted under "Self, Loans, and Family." Full-time graduate students working for an advanced degree who are employees of another organization, on leave of absence, and whose major support is provided by their employer, should be listed under "Other U. S. Sources." If a graduate student receives stipend support from more than one source, choose the *major* source. For cases of two or more equivalent sources choose one *major* source category so that *using only whole numbers* the departmental data sheet will give a reasonably accurate *average* support picture for the department.

Care should be used in listing support sources accurately so that students (particularly research assistants) supported under U. S. Government grants are listed under the appropriate U. S. Government agency (e.g., students supported on an AEC research grant should appear under AEC and students supported under an NSF Institutional Grant should appear under NSF, not under "Institutional Support"). Institutional Support refers to support from "This" institution, as well as from State and local governments.

Students are to be classified according to citizenship, i.e., *U. S.* citizens (or nationals, e.g., native residents of a possession of the U. S. such as American Samoa), and *foreign* students. Applicants for U. S. citizenship are to be considered as "foreign" until the date their citizenship becomes effective.

Each row total given under *ALL SOURCES* is to be split into two components, *First Year* and *Beyond First*. Thus *every* full-time graduate student enrolled for an advanced degree is counted only once by a major source of support and once again in a separate breakout by level (First Year or Beyond First) of study.

**Item 6–**
Insert in the appropriate boxes the number of full-time students who were enrolled in this department in Fall 1971. If the exact data are not at hand, please give a reasonable estimate.

**Item 7–**
The numbers of graduate students who are working for advanced degrees, but who are not pursuing graduate work full time, are enumerated under the entries for *part time*. Do not include "special" students who are *not* enrolled for advanced degrees or students who have left your institution but are completing their theses while engaged in other activities.

**Item 8–**
Under *Postdoctorals* and/or *Research Associates*, include individuals with doctorates (including foreign degrees that are equivalent to U. S. doctorates) who devote *full time* to research activities or study in the department under temporary appointments carrying no academic rank such as instructor or above. Such appointments are usually for a *specific time period*. They may contribute to the academic program through seminars, lectures, or working with graduate students. Their postdoctoral activities have an element of additional training for them. Under (1), give the total number of Postdoctorals and/or Research Associates as defined above, as of Fall 1971. Of this number, enter under (2) the number who received their doctorates in *1967* or later. Under (3) enter the total appointments in this department as of Fall 1972, and under (4), the number of these receiving their doctorates in 1968 or later.

NSF Form 727, October 1972

# NATIONAL SCIENCE FOUNDATION
## SURVEY OF GRADUATE SCIENCE STUDENT SUPPORT, FALL 1972
## DEPARTMENTAL DATA SHEET

*(NOTE: Before filling out please read the instructions on the reverse)*

1. Name and address of institution: _____
2. Science Department (or unit) covered by this data sheet: _____
3. Person in Department (or unit) preparing this form: Name _____
4. Highest degree program offered by Department (or unit) in Fall 1972 (CHECK ONLY ONE) Master's ___(1) Doctorate (including MD) ___(2)

5. Full-time graduate science students enrolled for advanced degrees (M.S. and Ph.D.) receiving support of $1,200 or more in Fall 1972.

| TYPE OF SUPPORT | CITIZENSHIP | U.S. GOVERNMENT SOURCE (EXCLUDING LOANS) | | | | | | | | | | NON-U.S. GOVERNMENT SOU | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | AEC (a) | VET. ADM. (G.I. BILL) (b) | DOD (c) | HEW NDEA (d) | HEW PHS (NIH) (NIMH) (e) | HEW Other HEW (f) | NASA (g) | NSF (h) | Other U.S. Government (i) | Total U.S. Government (a-i) (j) | Institutional Support a/ (k) | Self, Loans, and Family (l) | Other U.S. Sources b/ (m) | Foreign Sources (n) | |
| Fellowships and Traineeships | U. S. (1) | | | | | | | | | | | | | | | |
| | Foreign (2) | | | | | | | | | | | | | | | |
| Graduate Research Assistantships | U. S. (3) | | | | | | | | | | | | | | | |
| | Foreign (4) | | | | | | | | | | | | | | | |
| Graduate Teaching Assistantships | U. S. (5) | | | | | | | | | | | | | | | |
| | Foreign (6) | | | | | | | | | | | | | | | |
| Other Types of Support | U. S. (7) | | | | | | | | | | | | | | | |
| | Foreign (8) | | | | | | | | | | | | | | | |
| All Types, Total | (9) | | | | | | | | | | | | | | | |
| Of line (9) how many are: | Men (10) | | | | | | | | | | | | | | | |
| | Women (11) | | | | | | | | | | | | | | | |

6. Full-time graduate science students enrolled for advanced degrees in this department as of Fall 1971; complete columns (j), (o), (p), (q), and (r):

7. Part-time graduate science students enrolled for advanced degrees (do not include "special" students):

| FALL 1971 | | | FALL 1972 | | |
|---|---|---|---|---|---|
| First Year (a) | Beyond First (b) | Total (c) | First Year (D) | Beyond First (e) | Total (f) |
| | | | | | |

8. Postdoctorals and/or Research Associates:

| FALL 1971 | | |
|---|---|---|
| Total (a) | Recent Doctorals (since 1967) (b) | |
| | | |

a/ Include institutions and State and local governments.

b/ Include support from nonprofit institutions, industry, and all other U.S. sources.

NATIONAL SCIENCE FOUNDATION
SURVEY OF GRADUATE SCIENCE STUDENT SUPPORT, FALL 1972
DEPARTMENTAL DATA SHEET

*(NOTE: Before filling out please read the instructions on the reverse)*

OMB No. 99-R0276
*Approval expires*
December 31, 1973

ered by this data sheet: _____

eparing this form: Name _____

Department (or unit) in Fall 1972 (CHECK ONLY ONE) Master's ___(1) Doctorate (including MD) ___(2)

Department Code
(See NRC Listing)

| ,200 | U.S. GOVERNMENT SOURCE (EXCLUDING LOANS) | | | | | | | | | | NON-U.S. GOVERNMENT SOURCE | | | | | ALL SOURCES | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AEC | VET. ADM. (G.I. BILL) | DOD | HEW | | | NASA | NSF | Other U.S. Government | Total U.S. Government (a-i) | Institutional Support a/ | Self, Loans, and Family | Other U.S. Sources b/ | Foreign Sources | Total Non-U.S. Government (k-n) | Total | First Year | Beyond First |
| SHIP | | | | NDEA | PHS (NIH) (NIMH) | Other HEW | | | | | | | | | | | | |
| | (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) | (k) | (l) | (m) | (n) | (o) | (j)+(o) (p) | (q) | (r) |
| (1) | | | | | | | | | | | | | | | | | | |
| (2) | | | | | | | | | | | | | | | | | | |
| (3) | | | | | | | | | | | | | | | | | | |
| (4) | | | | | | | | | | | | | | | | | | |
| (5) | | | | | | | | | | | | | | | | | | |
| (6) | | | | | | | | | | | | | | | | | | |
| (7) | | | | | | | | | | | | | | | | | | |
| (8) | | | | | | | | | | | | | | | | | | |
| (9) | | | | | | | | | | | | | | | | | | |
| (10) | | | | | | | | | | | | | | | | | | |
| (11) | | | | | | | | | | | | | | | | | | |

enrolled for advanced degrees in this department as of Fall 1971; nd (r);

enrolled for advanced degrees (do not include "special" students):

| tal | FALL 1972 | | |
|---|---|---|---|
| | First Year (D) | Beyond First (e) | Total (f) |
| | | | |

8. Postdoctorals and/or Research Associates:

| FALL 1971 | | FALL 1972 | |
|---|---|---|---|
| Total | Recent Doctorals (since 1967) | Total | Recent Doctorals (since 1968) |
| (a) | (b) | (c) | (d) |
| | | | |

cal governments.

b/ Include support from nonprofit institutions, industry, and all other U.S. sources.

# Other Science Resources Publications

| REPORTS | NSF No. | Price |
|---|---|---|
| Research and Development in Industry, 1973 | 75-315 | In press |
| The 1972 Scientist and Engineer Population Redefined. Vol. 1. Demographic, Educational, and Professional Characteristics | 75-313 | $3.70 |
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"National Sample of Scientists and Engineer in Employment, 1970-72 and 1972-74"

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